

Medicare Hospital

INFORMATION

Report

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MEDICARE HOSPITAL INFORMATION

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Volume 23

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MASSACHUSETTS

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U.S. Department of Health and Human Services

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Health Care Financing Administration

# STATES BY VOLUME

| VOL | STATE                             | VOL | STATE                         |
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## FOREWORD

The mission of the Health Care Financing Administration (HCFA) is to promote the timely delivery of appropriate, quality health care to the nation's aged, disabled, and poor. The agency must also ensure that beneficiaries are aware of the services for which they are eligible, that those services are accessible, and that agency policies and actions promote efficiency and quality within the total health care delivery system.

To that end, the annual release of the Medicare Hospital Information report is a key element in our continuing efforts to improve the effectiveness of medical practice and the quality of care provided to Medicare beneficiaries. It is also an important step in helping beneficiaries make more informed health care decisions.

The information in this release is not intended as a direct measure of quality of care. It is best used as a "screening tool"—that is, to identify potential problems for further review and, in consultation with medical staff, to evaluate a hospital's strengths and weaknesses. Thus, we believe that consumers can use this information to ask questions of their physicians, rather than reach judgments about the quality of care in a particular hospital. We also expect this information to be used by hospital administrators, physicians, peer review organizations, State survey and certification agencies, and researchers.

This publication presents information to answer the question "What is the actual mortality rate within a certain period of time for each hospital compared to the rate that would have been predicted, given what we know about the characteristics of the patients admitted?" Our basic approach to analyzing hospital mortality information has remained unchanged for the past five years; however, since the last publication of mortality information in May 1991, we have made some significant changes both in our methodology and in the way we display the results of our analysis. The four principal changes in the 1992 report are:

- A graphic presentation of the predicted and observed mortality rates for most hospitals for "All Causes" for Federal fiscal years 1988-1990 at 30, 90, and 180 days;
- The addition of information on certain variables that we use in computing the predicted mortality rates for each hospital;
- The addition of information on the geographic origin of each hospital's patients; and

- A comparison of the average length of stay in each hospital with the average for the State and Nation.

These refinements should make this information an even more valuable educational tool to help improve the quality of care in hospitals. The changes were reviewed by a panel of outside experts. The methodology used to calculate the observed mortality rate, the predicted mortality rate, and the standard deviation are briefly described in the Technical Information section of the Introduction to this volume and in more detail in the Technical Supplement (Volume 55).

We acknowledge the assistance we have received from the American Hospital Association—not only for providing the information detailing selected hospital characteristics, but also for alerting its members to the importance of this information. We are also grateful to the personnel in each hospital who took the time to review the data thoroughly and to provide us with comments and suggestions. As before, we have published individual hospitals' comments in their respective State volumes. Over the years, these communications have helped to improve and refine the information included in this publication.

HCFA is committed to improving the Medicare Hospital Information report. To that end, we are continuing to work with representatives of hospital, consumer, employer and other organizations to make this annual report as useful as possible for all consumers.

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# INTRODUCTION

The Medicare Hospital Information report contains information on acute care hospitals that treated Medicare patients discharged in Federal fiscal year (FY) 1990 (October 1, 1989—September 30, 1990).

This year's publication set consists of 54 State volumes and a Technical Supplement (Volume 55). There is one volume per State, except that California and Texas have two volumes each, Hawaii is combined with American Samoa and Guam, and Puerto Rico and the Virgin Islands are combined together in one volume.

Each hospital's two summary data pages are arranged alphabetically by hospital name in each State volume. These data pages consist of:

- The hospital's FY 1990 Medicare hospital mortality rates;
- A graphic presentation of the predicted and observed mortality rates for most hospitals for "All Causes" for FYs 1988—1990 at 30, 90, and 180 days;
- The FY 1990 values for selected explanatory factors used to predict the mortality rates;
- Origins and lengths of stays of Medicare admissions; and
- Hospital characteristics, such as the number of beds and other characteristics, which we obtained from data contained in the American Hospital Association's (AHA) 1990 Annual Survey of Hospitals files or, when such information was not available from the AHA file, the Health Care Financing Administration's (HCFA) Online Survey, Certification and Reporting System (OSCAR) file.

*Please note that the information regarding origins and lengths of stays and hospital characteristics are presented strictly for information purposes only. They were not used to calculate the hospital's predicted mortality rates.*

Toward the end of each volume, we include both State and national mortality rates developed by our analysis, as well as the comments we received from individual hospitals.

## DESCRIPTION OF MORTALITY INFORMATION

The mortality rates at a given hospital may reflect, among other factors, the age, sex, diagnoses, and severity of illness of patients admitted to that hospital, as well as the quality of care they received. Factors affecting health and the probability of death vary among the patient populations served by individual hospitals. Consequently, the mortality rates in different patient populations vary considerably.

These latest analyses of the mortality rates associated with Medicare hospitalizations are similar to those carried out in the four prior years. Only one hospitalization for every patient was used. As in last year's analysis, when a patient had multiple hospitalizations during the fiscal year, one stay was selected at random to be analyzed. We believe that the use of the randomly selected admission provides a better representation of a typical hospital admission and permits us to calculate mortality rates more nearly like those the hospital itself would calculate for its patients.

Although we publish data only on deaths which occur within 180 days of admission to the hospital, for purposes of analysis our methodology actually considers deaths which occur any time within 365 days of admission (with the exception that no date of death later than April 1, 1991 is used). This is part of the formula which assesses the long-term risk of mortality. With this approach, information about the early and later results of the hospitalization is provided. This is important because diseases evolve with different time courses, and treatments may have different short- and long-term effects. The choice of at least 180 days allows substantial followup consistent with timely reporting of HCFA data.

We again analyzed the data on a fiscal year, rather than on a calendar year, basis because it allows us to report on recent hospitalizations. Also, new Medicare rules are often instituted on a fiscal year basis.

For each hospital, mortality rates are presented for overall Medicare patient mortality and for eight medical conditions and nine procedures. The information consists of the number of Medicare patients; the observed or actual mortality rate (OBS); the predicted mortality rate (PRED), given the mix of patients; and a standard deviation (SD), a measure of the uncertainty of the predicted rate.

The following information will be helpful when reviewing specific information for any given hospital.



## *Number Of Cases*

This is the number of individual Medicare beneficiaries whose discharge in a fiscal year from the short-term, acute care hospital listed was selected for analysis. The total number of cases randomly selected for each hospital is presented under the category "All Causes." The eight medical condition and nine surgical procedure categories are subgroupings drawn from the "All Causes" selection. Although a particular patient may appear in only one of the eight medical condition categories, that same patient may also appear in one or more of the nine surgical procedure categories. Similarly, a patient may appear in one or more of the nine surgical procedure categories, even though he or she was not included in any of the eight medical condition categories.

The categories chosen for display represent HCFA's interpretation of the categories judged to be important by various outside advisors including the Institute of Medicine. The listed condition and procedure categories do not cover the reason for admission of all the hospitalized Medicare patients in this study. (The ICD-9-CM codes included in each condition and procedure category appear in Table 1 following this Introduction section.)

These conditions and procedures represent the causes for the hospital admission and/or surgical episodes during that stay; they do not necessarily represent the cause of death. HCFA does not have access to cause of death information.

## *Observed Mortality Rate (OBS)*

The observed mortality rate for each category is the percentage of each acute care hospital's selected Medicare patients who died within 30, 90, or 180 days of the selected admission. This rate does not represent the percentage whose death was caused by a particular condition or procedure.

The percentage is rounded to the nearest one-tenth of one percent. Both inhospital deaths and deaths occurring after discharge but within 30, 90, or 180 days of admission are included. For example, if a hospital had 1,000 patients included in the "All Causes" category and 124 of these patients died within 30 days of the selected admission, the 30-day observed mortality rate would be 12.4 percent; if an additional 17 patients died more than 30 but less than 91 days after admission, the 90-day observed mortality rate would be 14.1 percent; and if an additional 13 patients died more than 90 but less than 181 days after admission, the 180-day observed mortality rate would be 15.4 percent.

It is important to note that the observed mortality rate is cumulative; e.g., the 90-day observed mortality rate includes all deaths which occur within 30 days of admission, as well as those occurring more than 30 and less than 91 days after admission.

### *Predicted Mortality Rate (PRED)*

The predicted mortality rate for each hospital's patients is derived in part by determining, based on national experience, the contribution to the probability of dying associated with various patient characteristics such as:

- Principal diagnosis (grouped into 23 analytical risk categories),
- Age,
- Sex,
- Previous hospital admissions within the prior six months,
- Admission source (e.g., physician reference, skilled nursing facility reference),
- Admission type (e.g., elective or emergency), and
- The presence of up to seven comorbid conditions—cancer, chronic cardiovascular disease, chronic renal disease, chronic liver disease, chronic pulmonary disease, cerebrovascular degeneration, and chronic diabetes. A list of the ICD-9-CM codes defining the comorbid conditions is in Table 2 following this Introduction section.

### *Standard Deviation (SD)*

The standard deviation is a tool to gauge the extent to which the difference between the observed and predicted mortality rate is meaningful. In general, the greater the difference between the two rates, the greater the probability that the difference represents an actual variation from what would be expected in view of the national experience. The less chance that the difference between the PRED and the OBS can be attributed to statistical variability, the more grounds for possible concern about the institution's performance.

Information on how to use the SD to construct prediction intervals for use in assessing the real difference between the OBS and the PRED is included in the Technical Information section of this Introduction. The precision and interpretability of the estimates are weaker when there are no deaths or 50 or fewer cases in a particular category being analyzed. Thus, for these instances, dashes ("---") are placed in the SD column.



## **OBSERVED MORTALITY RATE AND PREDICTED RANGE FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**

Also in this year's report, we have presented graphs that display the information for most hospitals described above for FYs 1988 and 1989, as well as FY 1990. (In particular, these graphs could not be computed for hospitals that had 50 or fewer cases or no deaths in FYs 1988, 1989, or 1990). In constructing the graphs, we used 2 times the standard deviation to approximate a 95 percent prediction interval. The observed mortality is shown as a dot (•). The predicted mortality is shown at the middle of a range of mortality rates. The bottom of the range is the predicted mortality minus twice the standard deviation, and the top of the range represents the predicted mortality plus twice the standard deviation. The graphs for FY 1988 and FY 1989 are based on new random samples and new computations for this year's report. Thus, the calculations for some hospitals for FY 1988 and FY 1989 may be different from previous releases, because we are including more current data in this year's report.

## **FY 1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

This year's report includes the FY 1990 average at each hospital of many of the explanatory factors used to predict that hospital's mortality rates. This information provides a profile of the patients used in the analysis and should help to identify possible systematic coding errors in the claims data used to calculate the mortality rates. These percentages are derived from the patients included in the sample and should be applied to the total number of cases listed in "All Causes." It is important to note that neither the admission sources/types nor the comorbidities categories are mutually exclusive. For example, a patient could be both "referred by his personal physician" and "admitted for elective procedure." Similarly, a patient could have secondary diagnoses of both cancer and diabetes.

## **INFORMATION SOURCES AND NOTES**

We believe that when the mortality rate information is properly understood and applied, it can be very useful; it can also be misleading if it is interpreted incorrectly. The information simply describes one of several possible outcomes at a hospital—postadmission mortality for Medicare beneficiaries.

Mortality information is not necessarily representative of a hospital's total performance in all aspects of patient care. Individual hospitals may have very good reasons for their rates being higher than the rates predicted by the HCFA model. For example, one hospital might have different death rates than another because its patient mix is not fully accounted for by the model.

Accordingly, we offered each hospital the opportunity to review their specific information and to provide comments to HCFA and the public, and we included those comments that were received timely at the end of this volume. Users should read the discussions about the uses and limitations of the mortality information found on page xiii, as well as any comments a hospital may have provided.

### *Hospitals In The Analysis*

The hospitals included in this analysis are participating in Medicare as short-term, acute care facilities—all have a zero in the third position of their Medicare provider number. All other hospitals—those with something other than a zero in the third position of their provider number, such as rehabilitation facilities or psychiatric institutions—were excluded. This year, as in the past two years, we have also excluded hospices.

In some cases, we have included data for hospitals that closed, changed ownership, or changed management either during or subsequent to FY 1990. Our data included for those institutions reflects the situation as it existed at the time the hospitalizations analyzed occurred.

### *Data Sources*

This report is based primarily on Medicare hospital billing information for Federal fiscal years 1988, 1989, and 1990. While the principal source of the data for the analysis was the HCFA-maintained Medicare Provider Analysis and Review (MEDPAR) file, which contains information about each Medicare hospitalization, some of the information about beneficiaries, such as date of death, was obtained from the Social Security Administration. Hospitals submit bills to HCFA's fiscal intermediaries (which handle claims for the inpatient care provided to Medicare beneficiaries) which, in turn, submit this information to HCFA. The file is updated on a quarterly basis. Our analysis was based on information available following the June 1991 update of the MEDPAR file. It is estimated that by that time (nine months after the close of the fiscal year), 98 percent of all Medicare discharges in FY 1990 are included in the file.

### *Possible Limitations Of The Data*

In any large-scale data base, such as the one dealing with Medicare hospitalizations, there will be gaps or inaccuracies. For example, last year some hospitals had not accurately reported the source or type of admission, and thus erroneous information was included in the analysis for those hospitals. However, the fact that the files contain information on about 10 million hospital admissions to nearly 6,000 hospitals for each year provides some assurance that, for purposes of the statistical analysis conducted here, the information that might be



missing or inaccurate is such a small portion of the total that it would have little effect on the results for national estimates. Nevertheless, it may substantially affect an individual hospital if it were the source of the inaccurate information.

While we feel that the information used in this analysis is thorough and complete, there are a few points to keep in mind as you review the mortality information.

The information used is billing data; it is only as good as the information submitted by hospitals as part of the payment process. Although there is always a possibility that coding errors are included, we assume that, given the link to payment, hospitals have an incentive to submit bills accurately and promptly. We do know, however, that some hospitals submitted incomplete or erroneous data.

For example, following last year's public release of the hospital mortality data, several hospitals wrote to HCFA indicating that they had submitted incorrect data. Furthermore, they stated that if they had given us the correct information, their predicted mortality rates would have been higher than those presented in HCFA's report. Therefore, in this year's report we have annotated those hospitals' data pages with a footnote stating: "This hospital says that it submitted inaccurate data to Medicare and claims that its predicted mortality rate should be higher than that presented above." At this point, however, HCFA cannot confirm the validity of those hospitals' claims. The analysis results might very well be different if the data on which they were based were submitted accurately by those hospitals.

In our previous analysis of mortality data, we discovered that some States had zero admissions from a skilled nursing facility. While some of these problems were corrected on the MEDPAR files used for this analysis, at the time this study was initiated we found empirical evidence that some of the files still contained suspect information. The suspect data were identified by noting those months (date of discharge) and fiscal intermediaries for which the type and source of admission fields appeared to be interchanged. Based on our findings, we reversed these fields to at least partially correct the remaining discrepancies. The following list shows the specific instances for which the fields were reversed for this analysis.

#### TYPE AND SOURCE OF ADMISSION FLIPPED

| <u>FI No.</u> | <u>FI Name</u>         | <u>Dates</u>        |
|---------------|------------------------|---------------------|
| 00030         | Arizona Blue Cross     | 10/01/86 — 12/31/88 |
| 00080         | Maryland Blue Cross/DC | 06/01/87 — 09/30/87 |
| 00190         | Maryland Blue Cross    | 06/22/87 — 12/31/88 |
| 00400         | Texas Blue Cross       | 12/07/87 — 12/31/88 |

## HOW TO USE THIS INFORMATION

There are several key points to remember about the use of this information. **First, it is important to understand that the difference between the hospitals' mortality rates and the predicted rates in the tables in this report may not be a direct measure of the quality of care rendered in the hospitals.**

Second, the usefulness of this information depends upon the accuracy with which mortality rates can be predicted. We do not currently have any direct measurement tool with which we can fully adjust for severity of patient illness differences among hospitals. For instance, two hospitals may have very different death rates for patients admitted for stroke, even after we have adjusted for age, sex, and several other factors. This might happen because one hospital's stroke patients may consist of a significant number who are admitted in a coma (and are thus more likely to die), whereas another hospital's patient population may represent a broader spectrum of patients with cerebrovascular problems, or because these two hospitals, in fact, do provide different levels of quality of care. In addition, other factors affecting the probability of death in a particular case (e.g., family status/support, overall health status of the patient, etc.) are not included in the predictive model because information on them is not readily available.

Nevertheless, we believe that the information presented in this publication is an important contribution to the health care community and should be helpful to a wide range of individuals and organizations including consumers, hospital administrators, physicians, PROs, and researchers.

### *Use By Consumers — Some Key Questions*

Consumers should read carefully the explanations of the uses and limitations of the information. Listed below are some questions that we recommend a consumer think about before choosing a hospital. Please keep in mind that this is not a comprehensive list, but it should serve to illustrate the types of questions that are important to consider.

- Why are the hospital's observed mortality rates for "All Causes" consistently and significantly above the predicted rates for FY 1990?
- Why are the hospital's observed mortality rates for the condition for which I need treatment or the procedure I will undergo consistently and significantly above the predicted rates for FY 1990?
- How does this hospital's pattern of mortality compare with that of other hospitals in the State and Nation?



- Is the number of cases too small to present a satisfactory picture of the hospital?
- Does the hospital treat a large number of cases in the category for which I need treatment?
- Does the hospital treat a large number of patients who have several co-existing illnesses or who otherwise are likely to be "sicker" than average?

### *Other Users Of This Publication*

Among other users of this publication, we expect that the hospital administrator (in consultation with medical staff) will find the information most useful as a screening tool to evaluate a hospital's strengths and weaknesses. We know that some hospitals and their medical staffs, using established and newly emerging quality assessment techniques, are seeking information that will result in improved health care delivery.

### *Outside Assistance In Developing This Publication*

The development and presentation of the Medicare Hospital Information report continues to be an important part of HCFA's responsibilities in the health care community. To make the information as accurate and useful as possible, over the past several years we have discussed the theoretical framework and statistical approach with a number of nationally recognized technical experts in appropriate fields. Based on their recommendations, we believe that the models used in these analyses continue to be reasonable and appropriate.

In the past, we have conducted validation studies of our methodology. In general, these studies have found correlation between poor quality care and hospitals whose observed mortality rates significantly exceed the rates that would have been predicted. However, we have also found that detailed clinical data which more thoroughly characterize the severity of patient's illness, while they do not materially affect results describing the general pattern of mortality, do, in specific instances, alter our assessment of the comparison of the observed to the predicted mortality rates.

The format for presentation, the process for sharing the information with individual hospitals, and the statistical methodology have been discussed at various meetings with leaders of organizations representing Medicare beneficiaries, physicians, and hospitals. Also, we have spent many months reviewing the comments received from the hospitals regarding their patient-specific data for earlier years and our previous mortality information reports. Many suggestions from these sources have been incorporated into this report.

We have carefully investigated comments from individual hospitals on apparent discrepancies or errors generated in previous years. These discrepancies rarely had an effect on a hospital's overall mortality rate. Most of these instances fell into the following two broad categories.

- **Inaccurate Date of Death** — We found that inpatient billing coding errors (e.g., a hospital bill indicating that the patient's status at time of discharge was “expired” when the patient had, in fact, left the hospital alive) created many of these errors. We now have mechanisms in place that allow a continuous update of HCFA's master file, thereby enabling us to make corrections.
- **Discrepant Case Counts** — Our analysis counts only one acute care discharge in a fiscal year; normally, hospitals count each discharge. Thus, a patient admitted three times in a year would count three times for the hospital, but only once for the purpose of analyzing Medicare hospital mortality data presented in this report.



*We believe it is important for consumers of health care to have access to as much information about hospitals as possible when making health care choices. Along with hospital characteristics information, we have added this year information about the origin and length of stay of Medicare admissions. This information is presented for comparative purposes only and was not used in calculating a hospital's predicted mortality rates. These data were not part of the analyses, and any errors or discrepancies in them do not affect the predicted mortality rates.*

## ORIGIN OF MEDICARE ADMISSIONS

Data on the geographic origin of each hospital's patients are presented in this year's report. We obtained from the Health Insurance Master file the State and county of residence for each Medicare beneficiary discharged from a Medicare-certified, acute care hospital during FY 1990. We then compared that information with the location of the hospital to determine the percentage of all discharges where the patient lived within the same city/county as the hospital location, within the State where the hospital is located, or outside the State. The percentages are derived by dividing the number of discharges of beneficiaries in a geographic category by the total number of Medicare discharges from the hospital. Please note that these are percentages of total Medicare discharges, not of the mortality sample alone.

## MEDICARE AVERAGE LENGTH OF STAY

We obtained from the MEDPAR file the total days of care—both Medicare covered and noncovered—and divided that total by the number of discharges from each hospital. Total, rather than covered, days were used because, under the Prospective Payment System (PPS), if a Medicare patient has at least one day of hospital coverage available to him in the current spell of illness, the hospital will be paid the full diagnosis related group (DRG) amount plus any approved outlier amount, regardless of the number of days actually used.

Example: Hospital A had 2,513 Medicare discharges with a total of 24,379 days.

Calculation: 
$$\frac{24,379}{2,513} = 9.7 \text{ days}$$

The Medicare average length of stay is 9.7 days.

## HOSPITAL CHARACTERISTICS

As noted previously, we have again included information on selected hospital characteristics such as the number of beds, occupancy rate, ownership, staffing, and specialty services. This information was obtained from the American Hospital Association's (AHA) 1990 Annual Survey of Hospitals, with the exception of the case mix index (CMI), which was derived from HCFA billing data. This file consists of information voluntarily reported by hospitals to the AHA. In instances where AHA data were unavailable, for example for hospitals that did not respond to the AHA survey, we derived the information from HCFA's Online Survey, Certification and Reporting system (OSCAR). The hospital characteristics and the specific special services listed were selected with the concurrence of the AHA as being those most meaningful to the Medicare population. Information on these specific data elements follows.

### *AHA Definitions (except for CMI)*

**Survey and Year** — AHA 1990. Source is the American Hospital Association's 1990 Annual Survey of Hospital files.

### **Profile**

**Total beds (#)** — Number of beds (including subacute beds), cribs, and pediatric and neonatal bassinets regularly maintained (set up, staffed, and ready for use) for inpatients as of the close of the reporting period; does not include bassinets for normal newborn infants.

**Occupancy rate (percent)** — Ratio of average daily census to the average number of beds (statistical beds) maintained during the 12-month reporting period. (NOTE: The number of these "statistical beds" may differ from the bed count at the close of the reporting period.)

**Ownership/control** — State government, local government, district/authority, church, private nonprofit, private for profit, or Federal Government.

**Medicare discharges** — The total number of inpatient discharges for Medicare patients for those hospitals selected for the mortality calculations, including all discharges for persons with more than one hospitalization during the year. (The mortality data include only one randomly selected discharge for each hospitalized enrollee. Therefore, this figure may reflect more discharges than the actual number of cases randomly selected for the mortality study.)



***Case mix index (CMI)*** — A measure of the overall complexity of the Medicare cases treated by a given hospital compared to the complexity of the national average case mix. The CMI represents the relative costliness of each hospital's mix of cases compared to the national average mix of cases. A CMI of greater than one means that a hospital treats more complex cases than average. A CMI of less than one means that a hospital treats less complex cases than average. The CMI for each hospital is calculated on an annual basis. In this report, the CMI presented for each hospital is calculated based on its discharges in FY 1990.

A hospital's CMI is calculated by multiplying the number of cases in each DRG by the relative weight of that DRG, summing the products, and dividing the sum by the total number of cases for the year. For calculating the FY 1990 CMI, use the DRG relative weights published in the *Federal Register*, Volume 54, Number 169, pages 36468 ff., dated September 1, 1989.

## **Staffing (all AHA counts are as of 9/30/90)**

***Total number of physicians*** — Total active and associate medical staff.

***Percent of physicians who are board-certified specialists*** — Physicians who have passed an examination given by a medical specialty board and have been certified by that board as a specialist.

***Medical residents/interns*** — Full-time equivalent (FTE) medical residents or interns.

***Registered nurses*** — Full-time equivalent (FTE) registered nurses.

***Licensed practical nurses*** — Full-time equivalent (FTE) licensed practical nurses.

## **Specialty Services**

***Burn Unit*** — Provides more intensive care to severely burned patients than the usual acute nursing care provided in medical and surgical units. Beds must be set up and staffed in a unit specifically designated for this service.

***Cardiac Intensive Care*** — Provides patient care of a more specialized nature than the usual medical and surgical care, on the basis of physicians' orders and approved nursing care plans. The unit is staffed with specially trained nursing personnel, and contains monitoring and specialized support or treatment equipment for patients who, because of heart seizure,

open-heart surgery, or other life-threatening conditions, require intensified, comprehensive observation and care. May include myocardial infarction, pulmonary care, and heart transplant units. Beds must be set up and staffed in a unit(s) specifically designated for this service.

***Comprehensive Geriatric*** — Provides diagnostic and evaluation services that determine elderly patients' long-term care needs. It includes the assessment of medical conditions, functional activities, and mental and emotional conditions, and incorporates these into a treatment plan which includes family and financial concerns as well as medical needs.

***Hospice Care*** — A program providing primarily medical relief of pain and support services to terminally ill patients and assistance to their families in adjusting to the patients' illness and death.

***Medical/Surgical Intensive Care*** — Provides nursing care to adult and/or pediatric patients of a more intensive nature than the usual medical, surgical, pediatric, and/or psychiatric care on the basis of physicians' orders and approved nursing care plans. Included are medical-surgical, pediatric, and psychiatric (isolation) units. These units are staffed with specially trained nursing personnel, and contain monitoring and specialized support equipment for patients who, because of shock, trauma, or life-threatening conditions, require intensified, comprehensive observation and care. These units may also include cardiac care when such services are not approved in a distinct cardiac care unit. This category is called "intensive care unit" in OSCAR.

***Organ/Tissue Transplant*** — The hospital has the necessary staff and equipment to perform the surgical removal of a viable human organ or tissue from a donor, either living or deceased, and the surgical grafting of the organ/tissue to a suitably evaluated and prepared patient.

***Other Intensive Care*** — Provides nursing care to adult and/or pediatric patients with a specialized disease or condition of a more intensive nature than the usual medical, surgical, pediatric, and/or psychiatric care on the basis of physicians' orders and approved nursing care plans. Examples reported include oncology or spinal cord injuries. These units are staffed with specially trained nursing personnel and contain monitoring and specialized support equipment appropriate for the patients' specialized conditions.

***Trauma Center*** — Provides emergency and specialized intensive care to critically injured patients.



## Other Specialty/Hospital-Based Services

***Alcohol/Drug*** — Hospital services for the medical care and/or rehabilitative treatment of outpatients whose primary diagnosis is alcoholism or other chemical dependency.

***Rehabilitation*** — A unit having designated beds and providing a comprehensive array of multidisciplinary medical rehabilitation services.

***Psychiatric*** — Care provided to emotionally disturbed, chronically mentally ill, mentally disordered, or other mentally incompetent patients on the basis of physicians' orders and approved nursing care plans. Beds must be set up and staffed in units specifically designated for this service.

***Medicare Swing Beds*** — The hospital is certified by Medicare to provide “swing bed” services; that is, some acute care beds can be used for skilled nursing facility type care in the hospital for Medicare purposes.

## *OSCAR Definitions (except for CMI)*

**Survey and Year** — HCFA, most recent year. Data were derived from the Online Survey, Certification and Reporting System (OSCAR).

## Profile

***Total beds (#)*** — Total number of operational beds eligible for Medicare payment.

***Ownership/control*** — Church; private, nonprofit; other nonprofit; proprietary; Federal Government; State government; local government; and hospital district or authority.

***Case mix index (CMI)*** — See definition shown in AHA “Profile” section.

## Staffing

***Medical residents/interns*** — Full-time equivalent (FTE) medical residents or interns.

***Registered nurses*** — Full-time equivalent (FTE) registered nurses.

***Licensed practical nurses*** — Full-time equivalent (FTE) licensed practical nurses.

## Specialty Services

**NOTE:** There are no specific definitions of specialty services in OSCAR. Characteristics are self-reported by each hospital at initial Medicare certification and recertification, and are generally understood to parallel the explicit AHA definitions (above). The AHA categories “comprehensive geriatric” and “other intensive care” are not available in OSCAR. However, they may be included in the OSCAR category of other specialty services (not shown in table).

**Coronary Care** — See definition shown in AHA “Specialty Services” section.

**Intensive Care Unit** — See definition shown in AHA “Specialty Services” section. These units may also include other intensive care units in OSCAR reporting.

**Organ Transplant** — See definition shown in AHA “Organ/Tissue Transplant” section. May include tissue transplants because there is not a separate field in OSCAR for these services.

# TECHNICAL INFORMATION

## DATA SOURCES

The data analyzed in this report are obtained from the Medicare Provider Analysis and Review (MEDPAR) file for the fiscal years 1987-1990, which contains information on the hospital stays of Medicare beneficiaries. The principal sources of data for this file are the bills (known as HCFA-1450 or UB-82) submitted by the hospitals to HCFA through fiscal intermediaries. The MEDPAR file also contains data about the beneficiaries, such as age, sex, and date of death, which are obtained from the Social Security Administration, the Railroad Retirement Board, or the Office of Personnel Management.

Hospital stays with discharges in fiscal years 1988, 1989, and 1990 were used in these analyses. Hospital stays in 1987 were used only to characterize the prior admissions of the patients in the 1987 cohort. Only acute care hospital stays in short-term (general and specialty) hospitals were selected. These hospitals have a "0" in the third position of their Medicare provider number. Hospital stays in institutions (designated by a "9" in the fourth position of the provider number) and hospital stays in psychiatric units, rehabilitation units, swing-beds and alcohol/drug units (with "special unit codes" of S, T, U and V, respectively, in the third position) were excluded.

## THE MORTALITY MODEL

For each beneficiary in each year one hospitalization was selected at random. Choosing a specific hospitalization is necessary to avoid multiple counting of the same death for that year. Selecting a random hospitalization instead of the first or last in the year produces mortality rates that are more representative of the rates that a hospital might calculate for its patients. Also, the mortality rates based on this random selection process reflect an intermediate position between the rates produced by the alternatives.

The selected hospital stays were analyzed separately by analytical category. The analytical categories were created by grouping ICD-9-CM diagnosis codes that had similar mortality patterns. The procedures for creating the analytical categories and the groups of ICD-9-CM diagnosis codes that defined them are detailed in the Technical Supplement.

The mortality experience of the patients was evaluated as a function of time within 365 days of the admission. The factors included in the mortality model used to evaluate each patient's probabilities of death are given in Table 3. They consist of demographic characteristics (age and sex), major comorbidities (chronic diseases likely to have been present at admission and believed to



complicate management and increase the likelihood of an adverse outcome), prior admissions (grouped into five risk or severity levels) within the 6 months preceding the admission evaluated, admission type (emergent, elective, etc.), and admission source (referral from the physician's office, the nursing facility, etc.). The specific reason for the admission (the principal diagnosis) and the performance of selected surgical procedures were additional factors used in the estimation of the predicted probability of death (see below).

The observed mortality rate for a hospital was calculated by means of the lifetable method ("The LIFETEST Procedure," Chapter 22, SAS User's Guide: Statistics, Version 5 Edition, pages 529-557).

## ANALYTIC TECHNIQUES

A time-to-event or survival model with explanatory or concomitant variables was used to ascertain the influence of the patient characteristics listed above on the probability of death. A feature of such a model is allowance for "right censored" observations. Generally, these are events or outcomes which would have occurred but for some interference that prevents further observation. In the present analysis, "right censoring" occurs when a patient is withdrawn alive from the study April 1, 1991 or at the end of the followup period of 365 days.

The survival function,  $S(t)$ , is one of several equivalent ways of expressing the model. Another form uses the cumulative distribution function or the mortality function

$$F(t) = 1 - S(t).$$

Another useful formulation of these models is the hazard function,  $h(t)$ , also known as the force of mortality or risk function. The hazard is the rate of decrease in the number of survivors relative to the number of survivors at a specific time. Mathematically, the hazard function is

$$h(t) = - \frac{1}{S(t)} \frac{dS(t)}{dt} = - \frac{d \ln(S(t))}{dt}.$$

The probability density function,  $f(t)$ , commonly used in statistical texts can be expressed as follows:

$$f(t) = \frac{dF(t)}{dt} = h(t)S(t).$$

The area under the survival curve is the expected value for  $t$ . In some cases, the area under the survival curve is restricted to an interval  $0-t_1$  where  $t_1$  might be one year, for example.

The specific time-to-event or survival model used in the present analysis is Bailey's modification of the Makeham model. The survival function for the Bailey-Makeham model is

$$S(t) = \exp\left\{-\delta t - \left(\frac{\alpha}{\gamma}\right)(1 - \exp(-\gamma t))\right\}$$

where

$$\alpha = \exp(\alpha_0 + \alpha_1 x_1 + \dots + \alpha_i x_i + \dots + \alpha_k x_k)$$

$$\gamma = \exp(\gamma_0 + \gamma_1 x_1 + \dots + \gamma_i x_i + \dots + \gamma_k x_k)$$

$$\delta = \exp(\delta_0 + \delta_1 x_1 + \dots + \delta_i x_i + \dots + \delta_k x_k)$$

are the expressions for each of the structural parameters  $\alpha$ ,  $\gamma$ , and  $\delta$  in terms of the  $k$  concomitant variables  $x_i$  and their associated component parameters  $\alpha_i$ ,  $\gamma_i$ , and  $\delta_i$  for  $i=1, 2, \dots, k$  and three intercepts or component parameters  $\alpha_0$ ,  $\gamma_0$ , and  $\delta_0$ . The structural parameter  $\delta$  is the long-term risk which is approached as  $t \rightarrow \infty$ . The structural parameter  $\alpha$  is the initial excess risk which decays with rate constant  $\gamma$ .

For the survival function given above, the risk or hazard function has an especially tractable form of an exponential decay which approaches a long-term risk,  $\delta$ . The hazard function corresponding to the survival function above is

$$h(t) = \alpha \exp(-\gamma t) + \delta.$$

The estimation of the component parameters was carried out in a series of steps in which those covariates which had estimable and statistically significant ( $p < 0.05$ ) influences of the probability of death were identified for inclusion in the model. As the model for each of the 23 risk categories was estimated separately, different lists of covariates were used for the final core models.

This first step was followed by the estimation of the additional contribution of specific principal diagnoses in each risk category. In these analyses, the effects of the patient characteristics included in the core models were corrected for. Only those principal diagnoses were retained which were estimable and had more than 900 cases (more than 300 for codes identified by year). Similarly, after adjustment for the effects of both the variables in the core model and the principal diagnoses, correction terms were calculated to estimate the additional information about the probability of death associated with the categorization of the patients into the clinical groups used for the presentation of the data in the mortality tables (see below). These correction terms were negligible for the medical categories but substantial for the surgical categories.



Once the component parameters or regression coefficients  $\alpha_i$ ,  $\gamma_i$ , and  $\delta_i$  have been estimated, the predicted probability of patient death at any specified time after admission,  $1-S(t)$ , may be calculated for all individuals. To obtain the predicted mortality rate up to a given time for a hospital, it is then only necessary to average over the predicted probabilities of death of its patients to that time.

The analytical categories are useful for grouping the patients into relatively risk-homogeneous strata for the regressions. However, to gain insights into patterns of practice at hospitals, the data are presented for patients grouped into clinically meaningful medical and surgical categories. The 17 clinical categories used in the mortality tables and defined in Table 1 were identified by the Institute of Medicine as being of particular medical and epidemiologic interest.

## ESTIMATION OF THE STANDARD DEVIATION FOR PREDICTED MORTALITY

The standard deviation of the predicted mortality rate is used to assess how statistically different the observed mortality rate is from the rate predicted by the national experience with like patients. The standard deviation depends, in fact, on the variance of the residual or the difference between the observed,  $P$ , and predicted,  $\hat{\Theta}$ , mortality rates.

The residual has four components  $V_1$ ,  $V_2$ ,  $V_3$ , and  $V_4$  where  $V_1$  is the variance of the estimate of the predicted probability of death. This computationally intensive term was negligible for nearly all cases, compared to other components of variance. Consequently, this term was not included in the present analysis.

$V_2$  is the binomial variance for  $n$  patients

$$V_2 = \frac{\hat{\Theta} (1 - \hat{\Theta})}{n}.$$

$V_3$  is the variation among hospitals not explained by the mortality regression models containing the patient characteristics described above.

$$V_3 = \widehat{\text{Var}}(\hat{\Theta}) = \left(1 - \frac{1}{n}\right) \widehat{M_2}(\hat{\Theta})$$



where

$$\widehat{M_2(\Theta)} = \left\{ \left( \begin{array}{c} \text{Predicted mortality} \\ \text{on basis of} \\ \text{patient characteristics and} \\ \text{adjustment for hospital effects} \end{array} \right) - \left( \begin{array}{c} \text{Predicted mortality} \\ \text{on basis of} \\ \text{patient characteristics,} \\ \text{but omitting the hospital specific effects} \end{array} \right) \right\}^2 \left( \frac{1}{z_p^2} \right)$$

The quantity  $z_p$  corresponds to the statistical significance (p-value) of the hospital-specific effect.

$V_4$  is the variation not explained by the mortality regression models which each include, in addition, an indicator variable for the hospital:

$$V_4 = \left\{ (\text{Observed mortality}) - \left( \begin{array}{c} \text{Predicted mortality} \\ \text{on basis of} \\ \text{patient characteristics, and} \\ \text{adjustment for the hospital specific effects} \end{array} \right) \right\}^2$$

(The regression coefficients of the indicator variable for the hospital are a measure of the influence on the probability of patient death of factors not otherwise specified in the model. These factors include severity of illness not adequately reported on by the patient characteristics deduced from the claims data and the hospital's pattern of practice; i.e., performance.)

The standard deviation given in the mortality tables is just

$$SD = \sqrt{V_2 + V_3 + V_4}.$$

## STANDARDIZED MORTALITY RATIO (SMR)

Another method of evaluating a hospital's performance—the Standardized Mortality Ratio (SMR)—is obtained by dividing the observed mortality rate by the predicted mortality rate. An SMR of one means the observed and predicted mortality are equal. A ratio greater than one means the observed mortality exceeds the predicted. A ratio less than one means the observed mortality is less than expected. The more extreme the ratio (significantly greater than one indicating unusually high mortality and significantly less than one indicating unusually low mortality), the greater the attention which should be paid to the results of this mortality report.

For each of the conditions and procedures, selected percentiles for the observed distribution of the SMR are displayed in Table 4. The selected percentiles provide benchmarks for comparison. For example, for a hospital

with 300 cases in the "All Causes" category, with observed mortality of 12.2 percent and predicted probability of 10.0 percent at 30 days, the standardized mortality ratio is

$$\text{SMR} = 12.2/10.0 = 1.22.$$

Note that an SMR of one means the observed and predicted mortality are equal, while a ratio greater than one means the observed mortality exceeds the predicted, and a ratio less than one means the observed mortality is less than expected. There will be greater interest in the more extreme ratios, either greater than one — excessively high mortality — or less than one — extremely low mortality.

From Table 4 for FY 1990, we find that the ratio is just below the 75th percentile of 1.23. Hence, slightly under 75 percent of the hospitals have an SMR less than that found at this hospital.

However, for a hospital with 900 cases in the "All Causes" category, with observed mortality of 19.3 percent and predicted probability of 10.0 percent at 30 days, the standardized mortality ratio is

$$\text{SMR} = 19.3/10.0 = 1.93.$$

Since the SMR of 1.93 is greater than the 97.5 percentile of 1.35 (Table 4 for 750 or more cases), there is cause for concern. To further assess this, we examine the displayed data in terms of the measure of uncertainty, the standard deviation.

## MEASURES OF UNCERTAINTY

In principle, to use the standard normal approximations to determine prediction intervals, an adjustment must be applied for the skewness and kurtosis inherent in a mortality rate when the rate is considerably less than 50 percent and the number of cases is small. Table 5 presents the multiplicative factors, based on the binomial distribution, for the standard deviation needed to construct prediction intervals for the mortality rates at confidence levels of 75, 95 and 99 percent. Because of the approximations involved in the estimation of the skewness and kurtosis corrections, their precision decreases as the number of cases and the mortality rate decrease; i.e., as the value of the correction increases. In addition, because of simplifications and approximations in the estimation of the standard deviation, the precision of the multiplicative factors given in Table 5 exceeds the precision of the estimate of the standard deviation. Hence, the following rule-of-thumb represents an adequate approximation to the factors in Table 5 and an adequate guide to the statistical meaningfulness of the difference between the observed and the predicted mortality rates.



To illustrate the use of Table 5, consider a hospital with 75 cases and a predicted mortality of 13.0 percent with a standard deviation of 5.0 percent. Overall, for hospitals with patients with characteristics similar to those of this hospital, we would expect the actual or observed mortality rate to lie, 95 percent of the time, either between 13.0 percent and 22.9 percent if the actual is larger than the predicted, or between 3.3 percent and 13.0 percent if the actual is less than the predicted. That is because  $22.9 \text{ percent} = 13.0 \text{ percent} + 1.98 \times 5.0 \text{ percent}$ , the factor 1.98 having been read from the section of Table 5 with the heading "95 Percent Prediction Interval" and "Factor for Upper Bound," the row "75" for the number of cases, and, by interpolation, between the "10 percent" and the "20 percent" predicted mortality rate columns. Similarly,  $3.3 \text{ percent} = 13.0 \text{ percent} - 1.94 \times 5.0 \text{ percent}$ , the factor -1.94 having been read from the section of Table 5 with the heading "95 Percent Prediction Interval" and "Factor for Lower Bound" and the corresponding row and columns.

Therefore, in comparing the actual and predicted rates, more attention should be given to the hospital whose observed mortality rate lies beyond the bounds calculated for the 99 percent prediction interval than to the hospital whose observed mortality rate lies only beyond the bounds calculated for the 95 percent prediction interval. Likewise, more attention should be given to that hospital than to the hospital whose observed mortality rate lies only beyond the bounds calculated for the 75 percent prediction interval.

For the graphs, the observed mortality and an approximate 95 percent prediction interval are displayed. The prediction interval has bounds at the predicted mortality plus 2 times the standard deviation and at the predicted minus 2 times the standard deviation.

In the mortality rate tables, the observed and predicted mortality rates and the standard deviation as a measure for statistical importance of the difference are displayed for the overall and each of the conditions and procedures.



## HOW TO OBTAIN MEDICARE HOSPITAL INFORMATION

The publication has been widely distributed to State health organizations and hospital and medical associations. The publication is available to the public for purchase in 55 volumes, with each volume being sold separately through the Government Printing Office (GPO). More detailed information about the purchase of this publication may be obtained by contacting:

Superintendent of Documents  
Government Printing Office  
Washington, D.C. 20402

Telephone: (202) 783-3238

As in prior years, the information appearing in the Medicare Hospital Information report is available in machine-readable/electronic format (tape and diskette). The Medicare Hospital Information public use file provides the published information as contained in the 55-volume hardcopy publication, except that the AHA's hospital characteristics are not on this file. Hospital characteristics from HCFA files (OSCAR) are provided instead. The files contain additional information which is useful for supplemental analyses: averages by hospital, MSA, and State for each of the variables used in the model, mortality rates for 15, 30, 60, 90 and 180 days, and cross-reference files which relate State, MSA, and ICD-9-CM codes used to a name. These data should allow analysts to assess an individual hospital's performance in comparison to all hospitals in the State or applicable MSA.

Also available to hospitals in machine-readable format is their patient-specific data that were used in the report. These data include the patient variables used in the analysis (e.g., the number and severity level of prior hospitalizations considered by the methodology, admission source and type, etc.) and the predicted probability of death at each time interval for each individual included in the study. With these data it is possible for hospitals to better understand their statistics. Due to confidentiality considerations, requests for patient-specific data must be forwarded on hospital letterhead, must include the institution's Medicare provider number, and must be signed by the hospital administrator.

For information about obtaining Medicare Hospital Information electronic media data, please contact HCFA's Bureau of Data Management and Strategy at:

Health Care Financing Administration  
Bureau of Data Management and Strategy  
Office of Statistics and Data Management  
3-A-10 Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207  
Telephone: (410) 597-5151

**Table 1**

**DIAGNOSTIC AND PROCEDURE CATEGORIES**

The following lists the ICD-9-CM diagnostic and procedure codes used to classify and group patients for presentation

**CONDITION/PROCEDURE**

**ICD-9-CM CODES**

(D)=Diagnosis code

(P)=Procedure code

**Heart Disorders/Procedures**

Acute Myocardial Infarction  
(AMI)

All of 410 (D) (on 10/1/89 exclude 410 with 5th digit of a 2)

*Note: For code 410 a 5th digit was added on October 1, 1989.*

Congestive Heart Failure  
(CHF)

398.91, 402.01, 402.11, 402.91, 428.0, 428.1, 428.9 (all D)

Angioplasty  
(ANGPLSTY)

All of 36.0 (P) excluding 36.00, 36.03, 36.04, 36.09 (all P)

*Note: Code 36.0 had a 4th digit added on October 1, 1986. Code 36.0 got digits of 0, 1, 2, 3, and 9, and code 36.04 got some previously coded cases of 39.97. On October 1, 1987, code 36.01 was divided into 36.01 and 36.05, and some cases from 36.02 were put into 36.05.*

Coronary Artery Bypass Graft  
(CABG)

All of 36.1(P) and not Angioplasty (see above)

Pacemaker Insertion, Initial  
(PACE)

37.73, 37.74, 37.75, 37.77 (after 10/1/87 use 37.70 through 37.73) (all P)

*Note: Code 37.70 was restructured on October 1, 1987. Previously the code contained both leads and devices. On October 1 these were separated and devices were coded as 37.80 through 37.83, and codes for the leads were changed into various 37.70 codes.*

**CONDITION/PROCEDURE****ICD-9-CM CODES***(D)=Diagnosis code**(P)=Procedure code***Pulmonary Disorders****Pneumonia/Influenza  
(PNU)**

All of 480, all of 481, 482.2, 482.3, 482.9, 483, 485, 486, 487.0 (all D)

**Chronic Obstructive Pulmonary  
(COPD)**

All of 491, all of 492, all of 494, Disease all of 496; and 466.0, 518.82, 518.5, and 786.09 when there is a secondary diagnosis of any 496 (all D)

***Note:** Code 518.8 got a 5th digit on October 1, 1987. Some cases from 799.1 were put into codes 518.81 and 518.82.*

**Cerebrovascular Disorders/Procedures****Transient Cerebral Ischemia  
(TCI)**

433.1, 433.3, 435 (D) and exclude those patients with an endarterectomy at the time of admission—38.12(P)

**Stroke  
(STK)**

431, 434 through 434.9, 436 (all D)

**Carotid Endarterectomy  
(ENDART)**

38.12 (P) with 433.1 (D); 433.3 (D) or 435(D) as a principal diagnosis

**Musculoskeletal Disorders/Procedures****Fracture of Neck of Femur  
(FXHIP)**

All of 820 (D)

**Hip Replacement/Revision  
(HIPREP)**

81.5, 81.6 (exclude 81.69) (all P). On 10/1/89 code 81.51 (P) through 81.53 (P) with same diagnoses.

**Open Reduction of Fractured Femur  
(OPRDUX)**

79.35(P) on condition of 820 (D) as principal diagnosis



**CONDITION/PROCEDURE****ICD-9-CM CODES***(D)=Diagnosis code**(P)=Procedure code***Genitourinary Disorders/Procedures**

Prostatectomy  
(PROS) 60.2, 60.3 through 60.69 (all P)

Hysterectomy  
(HYS) 68.3 through 68.7 (P)

**Gastrointestinal Disorders/Procedures**

Cholecystectomy  
(CHOLOTMY) 51.22 (P)

**Sepsis**

Sepsis 003.1, 020.2, 022.3, 036.2, 036.3,  
036.89, 036.9, 038.0, 038.1, 038.2,  
038.3, 038.40, 038.41, 038.42, 038.43,  
038.44, 038.49, 038.8, 038.9, 054.5

**Table 2**

**COMORBIDITY CONDITIONS**

(all are D codes)

| COMORBIDITY                    | ICD-9-CM CODES                                                                                   |
|--------------------------------|--------------------------------------------------------------------------------------------------|
| Cancer                         | 141-160.9, 162-172.9, 174-208.91                                                                 |
| Chronic cardiovascular disease | 412-414.9, 426-429.1                                                                             |
| Chronic liver disease          | 571-572.8                                                                                        |
| Chronic renal disease          | 582-583.9, 585-587, 403.01, 403.11,<br>403.91, 404.02, 404.03, 404.12, 404.13,<br>404.92, 404.93 |
| Chronic diabetes               | 250.01, 250.1-250.91                                                                             |
| Chronic pulmonary disease      | 491-493.91, 496                                                                                  |
| Cerebrovascular degeneration   | 290-290.9, 294-299.9                                                                             |

# Table 3

## EXPLANATORY VARIABLES FOR THE MORTALITY MODEL

Generally the same variables are used for all diagnostic categories.

### Demographics

SXFM                      An indicator variable: = 1 if Female, 0 otherwise

AGEFM = AGESP if SXFM = 1, 0 otherwise

AGEML = AGESP if SXFM = 0, 0 otherwise

where

$$AGESP = \text{sign}(W-65) \left( \left| \frac{W-65}{65} \right| \right)^{1.44}$$

and

$$W = \begin{cases} 23 & \text{if AGE} \leq 23 \\ \text{AGE} & \text{if } 23 < \text{AGE} < 100 \\ 100 & \text{if } 100 \leq \text{AGE} \end{cases}$$

### Comorbidities

### ICD-9-CM Codes

(Indicator variables = 1 if comorbidity present on current or prior admission with discharge within 6 months prior to current admission, 0 otherwise)

|     |                                |                                                                                            |
|-----|--------------------------------|--------------------------------------------------------------------------------------------|
| CCA | Cancer                         | 141-160.9, 162-172.9, 174-208.91                                                           |
| CCV | Chronic cardiovascular disease | 412-414.9, 426-429.1                                                                       |
| CLV | Chronic liver disease          | 571-572.8                                                                                  |
| CRN | Chronic renal disease          | 582-583.9, 585-587, 403.01, 403.11, 403.91, 404.02, 404.03, 404.12, 404.13, 404.92, 404.93 |
| CDI | Chronic diabetes               | 250.01, 250.1-250.91                                                                       |
| COP | Chronic pulmonary disease      | 491-493.91, 496                                                                            |
| CCE | Cerebrovascular degeneration   | 290-290.9, 294-299.9                                                                       |



## Co Occurrence of Comorbidities

|         |                                       |
|---------|---------------------------------------|
| COP_CCV | 1 if COP = 1 and CCV = 1, 0 otherwise |
| CCA_CCV | 1 if CCA = 1 and CCV = 1, 0 otherwise |
| COP_CCA | 1 if COP = 1 and CCA = 1, 0 otherwise |
| CCE_CCV | 1 if CCE = 1 and CCV = 1, 0 otherwise |
| CRN_CCV | 1 if CRN = 1 and CCV = 1, 0 otherwise |

## Admission Sources and Types

(Indicator variables = 1 if source or type present, 0 otherwise)

|       |                                                   |
|-------|---------------------------------------------------|
| PREF  | Patient referred by personal or HMO physician     |
| TRSNF | Patient transferred from skilled nursing facility |
| ELCT  | Patient admitted for elective procedure           |
| EMRG  | Patient admitted for emergency                    |

## Co-Occurrence of Admission Source and Type

PREF\_ELEC = 1 if PREF = 1 and ELCT = 1, 0 otherwise

## Previous Hospitalizations

|         |                                                                                                             |
|---------|-------------------------------------------------------------------------------------------------------------|
| P_RISK1 | Number at 1st risk level with 3 or more set to 3                                                            |
| P_RISK2 | Number at 2nd risk level with 3 or more set to 3                                                            |
| P_RISK3 | Number at 3rd risk level with 3 or more set to 3                                                            |
| P_RISK4 | Number at 4th risk level with 4 or more set to 4                                                            |
| P_RISK5 | Number at 5th risk level with 3 or more set to 3                                                            |
| F(T)    | Probability of death from previous admission if discharge within 182 days of current admission, 0 otherwise |

## Time Trend

|        |                                                                                   |
|--------|-----------------------------------------------------------------------------------|
| FLAG89 | 1 if discharge in FY1989, 0 otherwise                                             |
| FLAG90 | 1 if discharge in FY1990, 0 otherwise                                             |
| INYEAR | Difference between current admission date and April 1 of fiscal year of discharge |

TABLE 4  
SMR DISTRIBUTION FOR HOSPITALS WITH GREATER THAN 50 CASES  
1990 STUDY, FY1990

| CONDITIONS/PROCEDURES    | NUMBER<br>OF<br>HOSPITALS | 30 DAYS |      |      |      |       | 90 DAYS |      |      |      |       | 180 DAYS |      |      |      |       |
|--------------------------|---------------------------|---------|------|------|------|-------|---------|------|------|------|-------|----------|------|------|------|-------|
|                          |                           | -----   |      |      |      |       | -----   |      |      |      |       | -----    |      |      |      |       |
|                          |                           | 2.5%    | 25%  | 50%  | 75%  | 97.5% | 2.5%    | 25%  | 50%  | 75%  | 97.5% | 2.5%     | 25%  | 50%  | 75%  | 97.5% |
| OVERALL( < 750 CASES )   | 2645                      | 0.45    | 0.88 | 1.04 | 1.23 | 1.72  | 0.56    | 0.90 | 1.03 | 1.17 | 1.54  | 0.61     | 0.90 | 1.02 | 1.15 | 1.46  |
| OVERALL( >= 750 CASES)   | 2684                      | 0.73    | 0.91 | 0.99 | 1.09 | 1.35  | 0.79    | 0.94 | 1.01 | 1.09 | 1.28  | 0.82     | 0.94 | 1.01 | 1.08 | 1.24  |
| CONDITIONS               |                           |         |      |      |      |       |         |      |      |      |       |          |      |      |      |       |
| -----                    |                           |         |      |      |      |       |         |      |      |      |       |          |      |      |      |       |
| AMI                      | 1405                      | 0.54    | 0.80 | 0.95 | 1.11 | 1.42  | 0.62    | 0.86 | 0.99 | 1.14 | 1.44  | 0.63     | 0.86 | 0.99 | 1.13 | 1.39  |
| CHF                      | 2335                      | 0.43    | 0.79 | 0.98 | 1.17 | 1.64  | 0.60    | 0.85 | 0.99 | 1.13 | 1.49  | 0.66     | 0.89 | 1.00 | 1.13 | 1.41  |
| PNEUMONIA/INFLUENZA      | 2428                      | 0.41    | 0.78 | 0.97 | 1.18 | 1.68  | 0.53    | 0.84 | 1.00 | 1.17 | 1.55  | 0.57     | 0.86 | 1.01 | 1.16 | 1.50  |
| COPD                     | 435                       | 0.00    | 0.63 | 0.97 | 1.34 | 2.06  | 0.30    | 0.78 | 1.02 | 1.26 | 1.74  | 0.40     | 0.82 | 1.01 | 1.24 | 1.69  |
| TRANS. CEREBRAL ISCHEMIA | 404                       | 0.00    | 0.00 | 0.83 | 1.34 | 3.20  | 0.00    | 0.48 | 0.85 | 1.31 | 2.27  | 0.21     | 0.60 | 0.90 | 1.21 | 2.05  |
| STROKE                   | 1789                      | 0.53    | 0.79 | 0.95 | 1.13 | 1.56  | 0.61    | 0.84 | 0.98 | 1.13 | 1.47  | 0.65     | 0.87 | 0.99 | 1.12 | 1.42  |
| HIP FRACTURE             | 1199                      | 0.21    | 0.67 | 0.93 | 1.27 | 2.10  | 0.40    | 0.76 | 0.94 | 1.19 | 1.80  | 0.47     | 0.78 | 0.97 | 1.16 | 1.64  |
| SEPSIS                   | 254                       | 0.51    | 0.79 | 0.96 | 1.12 | 1.50  | 0.65    | 0.86 | 0.99 | 1.13 | 1.47  | 0.69     | 0.89 | 1.01 | 1.15 | 1.44  |
| PROCEDURES               |                           |         |      |      |      |       |         |      |      |      |       |          |      |      |      |       |
| -----                    |                           |         |      |      |      |       |         |      |      |      |       |          |      |      |      |       |
| ANGIOPLASTY              | 425                       | 0.00    | 0.49 | 0.89 | 1.33 | 2.66  | 0.00    | 0.60 | 0.93 | 1.36 | 2.34  | 0.00     | 0.63 | 0.97 | 1.34 | 2.14  |
| CABG                     | 556                       | 0.20    | 0.68 | 1.03 | 1.39 | 2.45  | 0.28    | 0.73 | 1.00 | 1.32 | 2.09  | 0.28     | 0.73 | 1.01 | 1.30 | 2.10  |
| PACEMAKER                | 112                       | 0.00    | 0.41 | 0.72 | 1.37 | 3.25  | 0.20    | 0.61 | 0.90 | 1.21 | 2.17  | 0.21     | 0.65 | 0.84 | 1.16 | 1.87  |
| CAROTID ENDARTERECTOMY   | 73                        | 0.00    | 0.00 | 0.85 | 1.33 | 2.90  | 0.00    | 0.14 | 0.74 | 1.28 | 2.43  | 0.00     | 0.42 | 0.86 | 1.38 | 2.86  |
| HIP REPLACEMENT          | 763                       | 0.00    | 0.53 | 0.94 | 1.44 | 2.77  | 0.19    | 0.67 | 0.96 | 1.31 | 2.12  | 0.26     | 0.71 | 0.94 | 1.26 | 1.91  |
| REDUCT. OF HIP FRACTURE  | 276                       | 0.00    | 0.56 | 0.86 | 1.22 | 2.05  | 0.31    | 0.68 | 0.92 | 1.19 | 1.76  | 0.38     | 0.77 | 0.96 | 1.12 | 1.58  |
| PROSTATECTOMY            | 1576                      | 0.00    | 0.00 | 0.73 | 1.57 | 3.56  | 0.00    | 0.49 | 0.91 | 1.40 | 2.63  | 0.00     | 0.57 | 0.92 | 1.29 | 2.21  |
| CHOLECYSTECTOMY          | 714                       | 0.00    | 0.49 | 0.95 | 1.54 | 2.68  | 0.00    | 0.62 | 0.93 | 1.37 | 2.22  | 0.22     | 0.67 | 0.98 | 1.27 | 1.93  |
| HYSTERECTOMY             | 113                       | 0.00    | 0.00 | 0.00 | 2.00 | 6.69  | 0.00    | 0.00 | 0.76 | 1.70 | 3.59  | 0.00     | 0.24 | 0.75 | 1.27 | 2.91  |

TABLE 4  
SMR DISTRIBUTION FOR HOSPITALS WITH GREATER THAN 50 CASES  
1990 STUDY, FY1989

| CONDITIONS/PROCEDURES   | NUMBER<br>OF<br>HOSPITALS | 30 DAYS |       |       |       |       | 90 DAYS |       |       |       |       | 180 DAYS |       |       |       |       |
|-------------------------|---------------------------|---------|-------|-------|-------|-------|---------|-------|-------|-------|-------|----------|-------|-------|-------|-------|
|                         |                           | 2.5%    | 25%   | 50%   | 75%   | 97.5% | 2.5%    | 25%   | 50%   | 75%   | 97.5% | 2.5%     | 25%   | 50%   | 75%   | 97.5% |
|                         |                           | -----   | ----- | ----- | ----- | ----- | -----   | ----- | ----- | ----- | ----- | -----    | ----- | ----- | ----- | ----- |
| OVERALL( < 750 CASES )  | 2746                      | 0.50    | 0.87  | 1.04  | 1.23  | 1.73  | 0.58    | 0.89  | 1.03  | 1.17  | 1.54  | 0.61     | 0.89  | 1.01  | 1.14  | 1.44  |
| OVERALL( >= 750 CASES)  | 2669                      | 0.71    | 0.90  | 1.00  | 1.09  | 1.35  | 0.79    | 0.94  | 1.01  | 1.08  | 1.28  | 0.82     | 0.95  | 1.01  | 1.07  | 1.24  |
| CONDITIONS              |                           |         |       |       |       |       |         |       |       |       |       |          |       |       |       |       |
| -----                   |                           |         |       |       |       |       |         |       |       |       |       |          |       |       |       |       |
| AMI                     | 1412                      | 0.53    | 0.81  | 0.96  | 1.12  | 1.47  | 0.59    | 0.86  | 1.01  | 1.15  | 1.47  | 0.63     | 0.87  | 1.00  | 1.14  | 1.43  |
| CHF                     | 2293                      | 0.47    | 0.80  | 0.97  | 1.18  | 1.69  | 0.58    | 0.86  | 1.00  | 1.14  | 1.48  | 0.66     | 0.89  | 1.02  | 1.14  | 1.40  |
| PNEUMONIA/INFLUENZA     | 2179                      | 0.45    | 0.77  | 0.97  | 1.19  | 1.67  | 0.54    | 0.85  | 1.01  | 1.18  | 1.55  | 0.60     | 0.86  | 1.02  | 1.18  | 1.51  |
| COPD                    | 324                       | 0.21    | 0.68  | 0.99  | 1.32  | 2.13  | 0.44    | 0.78  | 1.04  | 1.27  | 1.91  | 0.49     | 0.84  | 1.04  | 1.24  | 1.66  |
| TRANS CEREBRAL ISCHEMIA | 420                       | 0.00    | 0.00  | 0.79  | 1.41  | 3.26  | 0.00    | 0.46  | 0.88  | 1.33  | 2.36  | 0.18     | 0.60  | 0.92  | 1.25  | 1.97  |
| STROKE                  | 1728                      | 0.53    | 0.80  | 0.95  | 1.12  | 1.56  | 0.62    | 0.85  | 0.97  | 1.11  | 1.46  | 0.67     | 0.88  | 0.99  | 1.13  | 1.40  |
| HIP FRACTURE            | 1126                      | 0.24    | 0.67  | 0.95  | 1.30  | 2.04  | 0.39    | 0.75  | 0.98  | 1.21  | 1.71  | 0.46     | 0.78  | 0.97  | 1.18  | 1.59  |
| SEPSIS                  | 174                       | 0.52    | 0.79  | 0.94  | 1.10  | 1.52  | 0.63    | 0.88  | 1.02  | 1.15  | 1.46  | 0.68     | 0.93  | 1.05  | 1.16  | 1.43  |
| PROCEDURES              |                           |         |       |       |       |       |         |       |       |       |       |          |       |       |       |       |
| -----                   |                           |         |       |       |       |       |         |       |       |       |       |          |       |       |       |       |
| ANGIOPLASTY             | 370                       | 0.00    | 0.46  | 0.84  | 1.35  | 2.55  | 0.00    | 0.55  | 0.88  | 1.33  | 2.52  | 0.00     | 0.61  | 0.94  | 1.32  | 2.44  |
| CABG                    | 501                       | 0.21    | 0.65  | 1.00  | 1.47  | 2.57  | 0.23    | 0.69  | 1.00  | 1.33  | 2.29  | 0.32     | 0.74  | 1.01  | 1.33  | 2.21  |
| PACEMAKER               | 91                        | 0.00    | 0.52  | 0.74  | 1.12  | 2.31  | 0.00    | 0.56  | 0.83  | 1.15  | 2.14  | 0.20     | 0.68  | 0.81  | 1.16  | 1.87  |
| CAROTID ENDARTERECTOMY  | 55                        | 0.00    | 0.00  | 0.82  | 1.51  | 5.01  | 0.00    | 0.47  | 0.86  | 1.31  | 4.00  | 0.00     | 0.43  | 0.85  | 1.28  | 3.12  |
| HIP REPLACEMENT         | 686                       | 0.00    | 0.52  | 0.92  | 1.44  | 2.46  | 0.00    | 0.65  | 0.94  | 1.27  | 1.95  | 0.21     | 0.67  | 0.94  | 1.19  | 1.75  |
| REDUCT. OF HIP FRACTURE | 246                       | 0.19    | 0.57  | 0.91  | 1.23  | 1.96  | 0.31    | 0.71  | 0.96  | 1.19  | 1.74  | 0.41     | 0.78  | 0.96  | 1.13  | 1.53  |
| PROSTATECTOMY           | 1570                      | 0.00    | 0.00  | 0.67  | 1.50  | 3.46  | 0.00    | 0.47  | 0.86  | 1.36  | 2.67  | 0.00     | 0.58  | 0.93  | 1.28  | 2.15  |
| CHOLECYSTECTOMY         | 680                       | 0.00    | 0.53  | 0.94  | 1.53  | 2.90  | 0.00    | 0.62  | 0.97  | 1.36  | 2.15  | 0.22     | 0.66  | 0.95  | 1.26  | 1.98  |
| HYSTERECTOMY            | 101                       | 0.00    | 0.00  | 0.00  | 1.80  | 5.44  | 0.00    | 0.00  | 0.78  | 1.60  | 4.21  | 0.00     | 0.00  | 0.91  | 1.38  | 2.99  |



TABLE 4  
SMR DISTRIBUTION FOR HOSPITALS WITH GREATER THAN 50 CASES  
1990 STUDY, FY1988

| CONDITIONS/PROCEDURES    | NUMBER<br>OF<br>HOSPITALS | 30 DAYS |       |       |       |       | 90 DAYS |       |       |       |       | 180 DAYS |       |       |       |       |
|--------------------------|---------------------------|---------|-------|-------|-------|-------|---------|-------|-------|-------|-------|----------|-------|-------|-------|-------|
|                          |                           | 2.5%    | 25%   | 50%   | 75%   | 97.5% | 2.5%    | 25%   | 50%   | 75%   | 97.5% | 2.5%     | 25%   | 50%   | 75%   | 97.5% |
|                          |                           | -----   | ----- | ----- | ----- | ----- | -----   | ----- | ----- | ----- | ----- | -----    | ----- | ----- | ----- | ----- |
| OVERALL( < 750 CASES )   | 2838                      | 0.46    | 0.89  | 1.05  | 1.23  | 1.75  | 0.54    | 0.90  | 1.03  | 1.16  | 1.57  | 0.59     | 0.90  | 1.02  | 1.14  | 1.45  |
| OVERALL( >= 750 CASES)   | 2693                      | 0.73    | 0.90  | 1.00  | 1.10  | 1.35  | 0.79    | 0.94  | 1.01  | 1.09  | 1.27  | 0.82     | 0.95  | 1.01  | 1.08  | 1.24  |
| CONDITIONS               |                           |         |       |       |       |       |         |       |       |       |       |          |       |       |       |       |
| -----                    |                           |         |       |       |       |       |         |       |       |       |       |          |       |       |       |       |
| AMI                      | 1414                      | 0.56    | 0.82  | 0.96  | 1.12  | 1.41  | 0.63    | 0.87  | 1.01  | 1.14  | 1.42  | 0.65     | 0.89  | 1.00  | 1.13  | 1.39  |
| CHF                      | 2246                      | 0.45    | 0.79  | 0.97  | 1.18  | 1.61  | 0.60    | 0.86  | 1.00  | 1.14  | 1.43  | 0.68     | 0.90  | 1.02  | 1.13  | 1.37  |
| PNEUMONIA/INFLUENZA      | 2069                      | 0.44    | 0.79  | 0.97  | 1.17  | 1.68  | 0.57    | 0.85  | 1.01  | 1.17  | 1.59  | 0.61     | 0.87  | 1.01  | 1.16  | 1.53  |
| COPD                     | 310                       | 0.21    | 0.67  | 0.92  | 1.30  | 2.17  | 0.39    | 0.79  | 0.98  | 1.20  | 1.81  | 0.51     | 0.82  | 0.99  | 1.19  | 1.59  |
| TRANS. CEREBRAL ISCHEMIA | 495                       | 0.00    | 0.00  | 0.84  | 1.48  | 2.94  | 0.00    | 0.48  | 0.92  | 1.39  | 2.28  | 0.21     | 0.60  | 0.92  | 1.27  | 1.92  |
| STROKE                   | 1726                      | 0.51    | 0.79  | 0.95  | 1.12  | 1.56  | 0.60    | 0.84  | 0.98  | 1.13  | 1.44  | 0.64     | 0.88  | 1.00  | 1.13  | 1.42  |
| HIP FRACTURE             | 1119                      | 0.24    | 0.65  | 0.96  | 1.27  | 2.07  | 0.40    | 0.78  | 0.98  | 1.21  | 1.77  | 0.47     | 0.80  | 0.98  | 1.17  | 1.64  |
| SEPSIS                   | 133                       | 0.58    | 0.77  | 0.92  | 1.08  | 1.64  | 0.56    | 0.86  | 1.00  | 1.13  | 1.54  | 0.67     | 0.88  | 1.02  | 1.14  | 1.53  |
| PROCEDURES               |                           |         |       |       |       |       |         |       |       |       |       |          |       |       |       |       |
| -----                    |                           |         |       |       |       |       |         |       |       |       |       |          |       |       |       |       |
| ANGIOPLASTY              | 297                       | 0.00    | 0.50  | 0.87  | 1.35  | 2.60  | 0.00    | 0.59  | 0.91  | 1.34  | 2.50  | 0.00     | 0.65  | 0.95  | 1.31  | 2.25  |
| CABG                     | 478                       | 0.21    | 0.68  | 0.98  | 1.39  | 2.40  | 0.32    | 0.73  | 1.00  | 1.36  | 2.12  | 0.38     | 0.75  | 1.01  | 1.31  | 2.04  |
| PACEMAKER                | 83                        | 0.00    | 0.34  | 0.65  | 1.04  | 1.75  | 0.01    | 0.54  | 0.85  | 1.03  | 1.70  | 0.23     | 0.69  | 0.87  | 1.10  | 1.57  |
| CAROTID ENDARTERECTOMY   | 69                        | 0.00    | 0.00  | 0.60  | 1.23  | 3.30  | 0.00    | 0.33  | 0.62  | 1.09  | 2.50  | 0.00     | 0.44  | 0.68  | 1.16  | 1.87  |
| HIP REPLACEMENT          | 670                       | 0.00    | 0.49  | 0.95  | 1.40  | 2.65  | 0.00    | 0.66  | 1.01  | 1.31  | 2.15  | 0.24     | 0.70  | 0.96  | 1.24  | 1.87  |
| REDUCT. OF HIP FRACTURE  | 259                       | 0.00    | 0.61  | 0.91  | 1.26  | 2.16  | 0.38    | 0.74  | 0.96  | 1.21  | 1.94  | 0.44     | 0.77  | 0.96  | 1.16  | 1.79  |
| PROSTATECTOMY            | 1619                      | 0.00    | 0.00  | 0.78  | 1.53  | 3.69  | 0.00    | 0.54  | 0.92  | 1.39  | 2.57  | 0.00     | 0.61  | 0.93  | 1.30  | 2.21  |
| CHOLECYSTECTOMY          | 642                       | 0.00    | 0.50  | 0.96  | 1.44  | 3.04  | 0.00    | 0.61  | 0.96  | 1.36  | 2.26  | 0.25     | 0.66  | 0.96  | 1.27  | 2.01  |
| HYSTERECTOMY             | 90                        | 0.00    | 0.00  | 0.00  | 1.57  | 5.00  | 0.00    | 0.00  | 0.68  | 1.43  | 2.83  | 0.00     | 0.28  | 0.67  | 1.15  | 2.88  |

**TABLE 5: MULTIPLICATIVE FACTORS FOR THE CALCULATION OF THE BOUNDS FOR PREDICTION INTERVALS**  
(n is the number of cases at your hospital and p is the predicted mortality rate)

| p | n    | 99% Prediction Interval |      |      |      |      | 95% Prediction Interval |      |      |      |      | 75% Prediction Interval |      |      |      |      |
|---|------|-------------------------|------|------|------|------|-------------------------|------|------|------|------|-------------------------|------|------|------|------|
|   |      | Factor for Upper Bound  |      |      |      |      | Factor for Upper Bound  |      |      |      |      | Factor for Upper Bound  |      |      |      |      |
|   |      | 1%                      | 5%   | 10%  | 20%  | 40%  | 1%                      | 5%   | 10%  | 20%  | 40%  | 1%                      | 5%   | 10%  | 20%  | 40%  |
|   | 25   | 2.95                    | 2.73 | 2.68 | 2.63 | 2.59 | 2.15                    | 2.04 | 2.01 | 1.99 | 1.97 | 1.17                    | 1.16 | 1.16 | 1.15 | 1.15 |
|   | 50   | 2.76                    | 2.65 | 2.63 | 2.60 | 2.58 | 2.05                    | 2.00 | 1.99 | 1.97 | 1.96 | 1.16                    | 1.15 | 1.15 | 1.15 | 1.15 |
|   | 75   | 2.70                    | 2.63 | 2.61 | 2.59 | 2.58 | 2.02                    | 1.99 | 1.98 | 1.97 | 1.96 | 1.16                    | 1.15 | 1.15 | 1.15 | 1.15 |
|   | 100  | 2.67                    | 2.61 | 2.60 | 2.59 | 2.58 | 2.01                    | 1.98 | 1.97 | 1.97 | 1.96 | 1.16                    | 1.15 | 1.15 | 1.15 | 1.15 |
|   | 150  | 2.64                    | 2.60 | 2.59 | 2.59 | 2.58 | 1.99                    | 1.97 | 1.97 | 1.96 | 1.96 | 1.15                    | 1.15 | 1.15 | 1.15 | 1.15 |
|   | 200  | 2.62                    | 2.60 | 2.59 | 2.58 | 2.58 | 1.98                    | 1.97 | 1.97 | 1.96 | 1.96 | 1.15                    | 1.15 | 1.15 | 1.15 | 1.15 |
|   | 300  | 2.61                    | 2.59 | 2.58 | 2.58 | 2.58 | 1.98                    | 1.97 | 1.96 | 1.96 | 1.96 | 1.15                    | 1.15 | 1.15 | 1.15 | 1.15 |
|   | 400  | 2.60                    | 2.59 | 2.58 | 2.58 | 2.58 | 1.97                    | 1.96 | 1.96 | 1.96 | 1.96 | 1.15                    | 1.15 | 1.15 | 1.15 | 1.15 |
|   | 500  | 2.59                    | 2.58 | 2.58 | 2.58 | 2.58 | 1.97                    | 1.96 | 1.96 | 1.96 | 1.96 | 1.15                    | 1.15 | 1.15 | 1.15 | 1.15 |
|   | 750  | 2.59                    | 2.58 | 2.58 | 2.58 | 2.58 | 1.97                    | 1.96 | 1.96 | 1.96 | 1.96 | 1.15                    | 1.15 | 1.15 | 1.15 | 1.15 |
|   | 1000 | 2.59                    | 2.58 | 2.58 | 2.58 | 2.58 | 1.96                    | 1.96 | 1.96 | 1.96 | 1.96 | 1.15                    | 1.15 | 1.15 | 1.15 | 1.15 |
|   | 2000 | 2.58                    | 2.58 | 2.58 | 2.58 | 2.58 | 1.96                    | 1.96 | 1.96 | 1.96 | 1.96 | 1.15                    | 1.15 | 1.15 | 1.15 | 1.15 |
|   | 5000 | 2.58                    | 2.58 | 2.58 | 2.58 | 2.58 | 1.96                    | 1.96 | 1.96 | 1.96 | 1.96 | 1.15                    | 1.15 | 1.15 | 1.15 | 1.15 |

| p | n    | Factor for Lower Bound |       |       |       |       | Factor for Lower Bound |       |       |       |       | Factor for Lower Bound |       |       |       |       |
|---|------|------------------------|-------|-------|-------|-------|------------------------|-------|-------|-------|-------|------------------------|-------|-------|-------|-------|
|   |      | Factor for Lower Bound |       |       |       |       | Factor for Lower Bound |       |       |       |       | Factor for Lower Bound |       |       |       |       |
|   |      | 1%                     | 5%    | 10%   | 20%   | 40%   | 1%                     | 5%    | 10%   | 20%   | 40%   | 1%                     | 5%    | 10%   | 20%   | 40%   |
|   | 25   | -2.21                  | -2.42 | -2.48 | -2.52 | -2.56 | -1.77                  | -1.88 | -1.91 | -1.93 | -1.95 | -1.13                  | -1.14 | -1.14 | -1.15 | -1.15 |
|   | 50   | -2.39                  | -2.50 | -2.53 | -2.55 | -2.57 | -1.87                  | -1.92 | -1.93 | -1.95 | -1.96 | -1.14                  | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 75   | -2.45                  | -2.52 | -2.54 | -2.56 | -2.57 | -1.90                  | -1.93 | -1.94 | -1.95 | -1.96 | -1.14                  | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 100  | -2.48                  | -2.54 | -2.55 | -2.56 | -2.57 | -1.91                  | -1.94 | -1.95 | -1.95 | -1.96 | -1.15                  | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 150  | -2.51                  | -2.55 | -2.56 | -2.57 | -2.57 | -1.93                  | -1.95 | -1.95 | -1.96 | -1.96 | -1.15                  | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 200  | -2.53                  | -2.56 | -2.56 | -2.57 | -2.57 | -1.94                  | -1.95 | -1.95 | -1.96 | -1.96 | -1.15                  | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 300  | -2.54                  | -2.56 | -2.57 | -2.57 | -2.57 | -1.94                  | -1.95 | -1.96 | -1.96 | -1.96 | -1.15                  | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 400  | -2.55                  | -2.57 | -2.57 | -2.57 | -2.57 | -1.95                  | -1.96 | -1.96 | -1.96 | -1.96 | -1.15                  | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 500  | -2.56                  | -2.57 | -2.57 | -2.57 | -2.58 | -1.95                  | -1.96 | -1.96 | -1.96 | -1.96 | -1.15                  | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 750  | -2.56                  | -2.57 | -2.57 | -2.57 | -2.58 | -1.95                  | -1.96 | -1.96 | -1.96 | -1.96 | -1.15                  | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 1000 | -2.57                  | -2.57 | -2.57 | -2.57 | -2.58 | -1.95                  | -1.96 | -1.96 | -1.96 | -1.96 | -1.15                  | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 2000 | -2.57                  | -2.57 | -2.57 | -2.58 | -2.58 | -1.96                  | -1.96 | -1.96 | -1.96 | -1.96 | -1.15                  | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 5000 | -2.57                  | -2.58 | -2.58 | -2.58 | -2.58 | -1.96                  | -1.96 | -1.96 | -1.96 | -1.96 | -1.15                  | -1.15 | -1.15 | -1.15 | -1.15 |



**Medicare  
Hospital  
Information**

# ADCARE HOSPITAL OF WORCESTER INC

107 LINCOLN ST  
WORCESTER, MA 01605  
Medicare Provider Number: 220062

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 37                 | 0.0                 | 0.3  | ----- | 0.0     | 0.9  | ----- | 0.0      | 1.7  | ----- |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Congestive Heart Failure.....              | 0                  |                     |      |       |         |      |       |          |      |       |
| Pneumonia/Influenza.....                   | 0                  |                     |      |       |         |      |       |          |      |       |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |       |         |      |       |          |      |       |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Stroke.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Fracture.....                          | 0                  |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0                  |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 0                  |                     |      |       |         |      |       |          |      |       |
| Hysterectomy.....                          | 0                  |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES

No Graphs are presented when the standard deviation  
was not computed for one or more of the three fiscal years,  
(1988, 1989, or 1990)



# ADCARE HOSPITAL OF WORCESTER INC

Medicare Provider Number: 220062

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 46.1 years  
Proportion female..... 24.3 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 0.0 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 0.0 %  
Admitted for emergency..... 0.0 %

### COMORBIDITIES:

Cancer..... 0.0 %  
Chronic cardiovascular disease..... 5.4 %  
Chronic liver disease..... 2.7 %  
Chronic renal disease..... 0.0 %  
Chronic pulmonary disease..... 0.0 %  
Cerebrovascular degeneration..... 8.1 %  
Diabetes mellitus..... 0.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 37.5%  
State ..... 57.1%  
Outside State ..... 5.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 11.4 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 114  
Ownership/Control..... Private, For Profit  
Case Mix Index (CMI) ..... 0.5593

### STAFFING:

Medical Residents/Interns ..... 0  
Registered Nurses..... 21  
Licensed Practical Nurses ..... 12

### SPECIALTY SERVICES:

Burn Unit ..... No  
Coronary Care Unit ..... No  
Hospice Care ..... No  
Intensive Care Unit ..... No  
Organ Transplant ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ADDISON GILBERT HOSPITAL

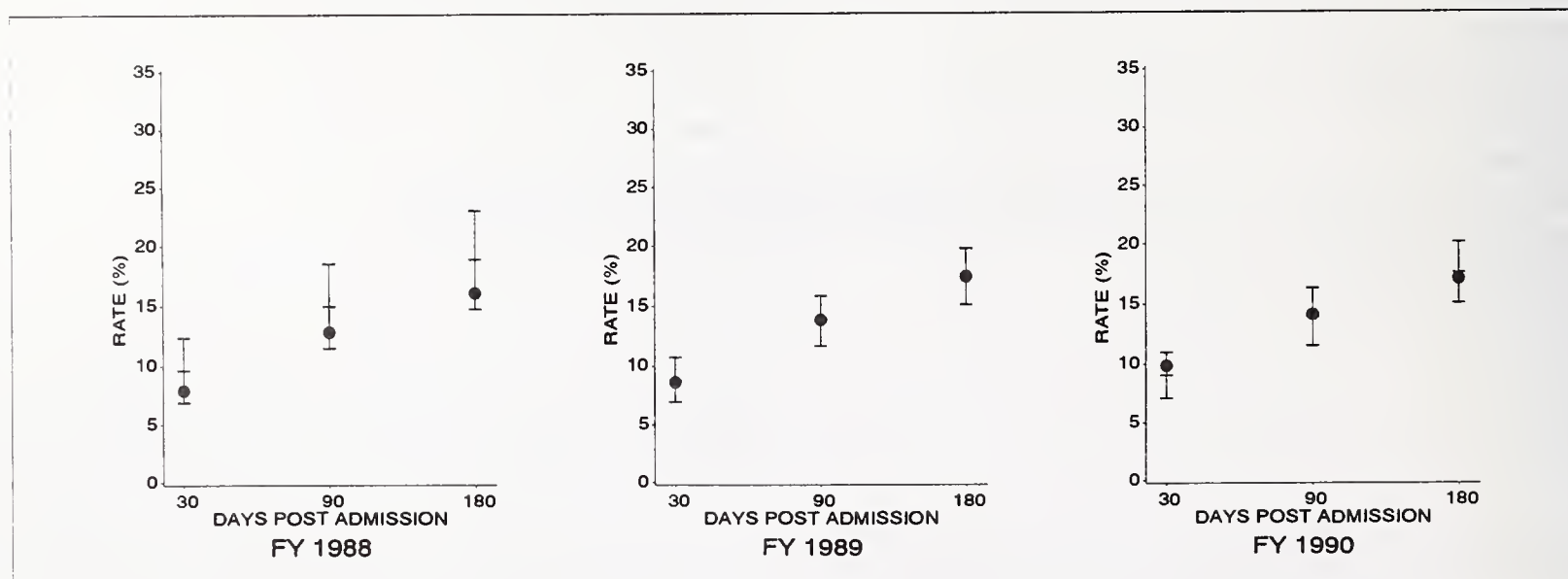
298 WASHINGTON ST  
GLOUCESTER, MA 01930  
Medicare Provider Number: 220128

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1058            | 9.8                 | 9.0  | 1.0   | 14.1    | 13.9 | 1.2   | 17.1     | 17.6 | 1.3   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 38              | 34.2                | 22.9 | ----- | 42.1    | 25.7 | ----- | 44.7     | 28.3 | ----- |
| Congestive Heart Failure.....              | 61              | 16.4                | 15.7 | 4.7   | 24.6    | 24.8 | 5.8   | 32.8     | 31.6 | 6.1   |
| Pneumonia/Influenza.....                   | 78              | 6.4                 | 14.4 | 6.0   | 15.4    | 20.0 | 6.6   | 16.7     | 23.9 | 6.0   |
| Chronic Obstructive Pulmonary Disease..... | 32              | 6.3                 | 5.1  | ----- | 9.4     | 9.9  | ----- | 12.5     | 14.1 | ----- |
| Transient Cerebral Ischemia.....           | 19              | 0.0                 | 2.4  | ----- | 0.0     | 5.3  | ----- | 0.0      | 8.3  | ----- |
| Stroke.....                                | 37              | 27.0                | 17.9 | ----- | 32.4    | 24.6 | ----- | 35.1     | 28.3 | ----- |
| Hip Fracture.....                          | 31              | 0.0                 | 6.7  | ----- | 9.7     | 12.5 | ----- | 19.4     | 16.5 | ----- |
| Sepsis.....                                | 14              | 21.4                | 23.5 | ----- | 21.4    | 32.3 | ----- | 21.4     | 37.3 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 7               | 0.0                 | 2.5  | ----- | 14.3    | 4.7  | ----- | 14.3     | 7.0  | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 17              | 0.0                 | 5.8  | ----- | 0.0     | 11.4 | ----- | 11.8     | 15.5 | ----- |
| Open Reduction of Hip Fracture.....        | 9               | 0.0                 | 8.6  | ----- | 33.3    | 15.6 | ----- | 33.3     | 20.2 | ----- |
| Prostatectomy.....                         | 33              | 0.0                 | 0.6  | ----- | 0.0     | 1.5  | ----- | 3.0      | 2.6  | ----- |
| Cholecystectomy.....                       | 14              | 0.0                 | 2.6  | ----- | 0.0     | 4.9  | ----- | 0.0      | 6.2  | ----- |
| Hysterectomy.....                          | 6               | 0.0                 | 0.4  | ----- | 0.0     | 1.0  | ----- | 0.0      | 1.7  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ADDISON GILBERT HOSPITAL

Medicare Provider Number: 220128

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.3 years  
 Proportion female..... 60.6 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 25.0 %  
 Transferred from skilled nursing facility..... 0.0 %  
 Admitted for elective procedure..... 8.9 %  
 Admitted for emergency..... 2.0 %

### COMORBIDITIES:

Cancer..... 7.6 %  
 Chronic cardiovascular disease..... 42.2 %  
 Chronic liver disease..... 1.4 %  
 Chronic renal disease..... 1.2 %  
 Chronic pulmonary disease..... 22.1 %  
 Cerebrovascular degeneration..... 5.0 %  
 Diabetes mellitus..... 6.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 94.4%  
 State ..... 2.8%  
 Outside State ..... 2.8%  
 Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.2 Days  
 State ..... 10.1 Days  
 National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 111  
 Occupancy Rate ..... 76.0 %  
 Ownership/Control..... Private, Non-Profit  
 Medicare Discharges ..... 43.8 %  
 Case Mix Index (CMI) ..... 1.1221

### STAFFING:

Total Number of Physicians..... 55  
 Percent of Physicians Board  
 Certified Specialists..... 69.1 %  
 Medical Residents/Interns ..... 0  
 Registered Nurses..... 120  
 Licensed Practical Nurses ..... 25

### SPECIALTY SERVICES:

Burn Unit ..... No  
 Cardiac Intensive Care ..... No  
 Comprehensive Geriatric ..... Yes  
 Hospice Care ..... No  
 Medical/Surgical Intensive Care ..... Yes  
 Organ/Tissue Transplant ..... No  
 Other Intensive Care ..... No  
 Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
 Rehabilitation..... No  
 Psychiatric ..... Yes  
 Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



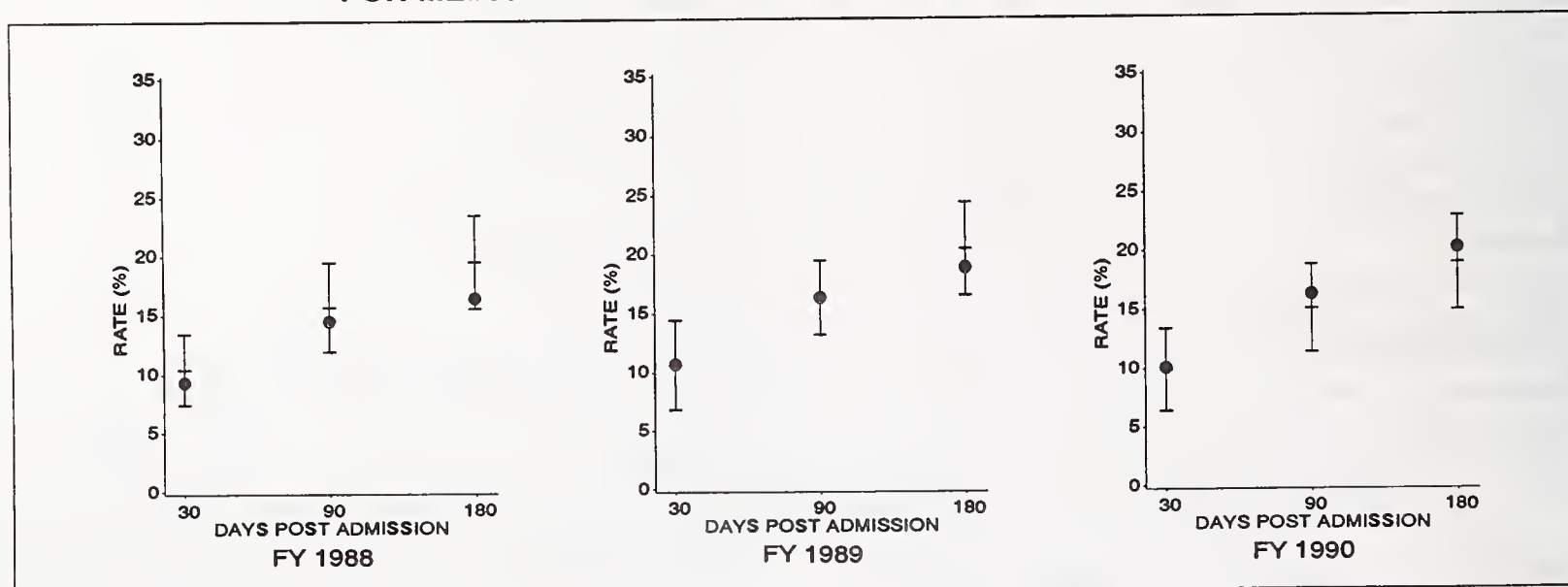
**AMESBURY HOSPITAL**  
 24 MORRILL PLACE  
 AMESBURY, MA 01913  
 Medicare Provider Number: 220131

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 564             | 10.1                | 9.9  | 1.8   | 16.3    | 15.1 | 1.9   | 20.2     | 18.9 | 2.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 17              | 23.5                | 23.0 | ----- | 23.5    | 26.3 | ----- | 23.5     | 29.2 | ----- |
| Congestive Heart Failure.....              | 35              | 17.1                | 16.0 | ----- | 28.6    | 25.5 | ----- | 40.0     | 32.3 | ----- |
| Pneumonia/Influenza.....                   | 44              | 20.5                | 19.2 | ----- | 27.3    | 26.0 | ----- | 31.8     | 30.5 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 11              | 0.0                 | 4.1  | ----- | 0.0     | 7.6  | ----- | 0.0      | 10.8 | ----- |
| Transient Cerebral Ischemia.....           | 10              | 0.0                 | 2.8  | ----- | 0.0     | 6.2  | ----- | 0.0      | 9.6  | ----- |
| Stroke.....                                | 16              | 18.8                | 19.4 | ----- | 18.8    | 26.1 | ----- | 31.3     | 29.9 | ----- |
| Hip Fracture.....                          | 22              | 9.1                 | 8.7  | ----- | 22.7    | 15.3 | ----- | 27.3     | 19.8 | ----- |
| Sepsis.....                                | 4               | 50.0                | 30.5 | ----- | 50.0    | 36.1 | ----- | 50.0     | 40.0 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 4               | 25.0                | 3.6  | ----- | 25.0    | 7.3  | ----- | 25.0     | 10.4 | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 3               | 33.3                | 7.4  | ----- | 33.3    | 13.4 | ----- | 33.3     | 17.0 | ----- |
| Open Reduction of Hip Fracture.....        | 16              | 6.3                 | 7.1  | ----- | 12.5    | 12.9 | ----- | 12.5     | 17.2 | ----- |
| Prostatectomy.....                         | 10              | 0.0                 | 1.4  | ----- | 0.0     | 2.7  | ----- | 10.0     | 4.4  | ----- |
| Cholecystectomy.....                       | 8               | 0.0                 | 2.1  | ----- | 0.0     | 4.1  | ----- | 0.0      | 5.4  | ----- |
| Hysterectomy.....                          | 0               |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD)  
 FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



**AMESBURY HOSPITAL**  
Medicare Provider Number: 220131

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 77.4 years  
Proportion female..... 62.2 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 49.6 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 7.8 %  
Admitted for emergency..... 67.7 %

**COMORBIDITIES:**

Cancer..... 6.2 %  
Chronic cardiovascular disease..... 50.7 %  
Chronic liver disease..... 0.5 %  
Chronic renal disease..... 2.0 %  
Chronic pulmonary disease..... 14.7 %  
Cerebrovascular degeneration..... 6.2 %  
Diabetes mellitus..... 8.5 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 87.8%  
State ..... 2.4%  
Outside State ..... 9.8%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 10.1 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 59  
Occupancy Rate ..... 71.0 %  
Ownership/Control..... Local Government  
Medicare Discharges ..... 53.8 %  
Case Mix Index (CMI) ..... 1.1297

**STAFFING:**

Total Number of Physicians..... 33  
Percent of Physicians Board  
Certified Specialists..... 93.9 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 51  
Licensed Practical Nurses ..... 20

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ANNA JAKUES HOSPITAL

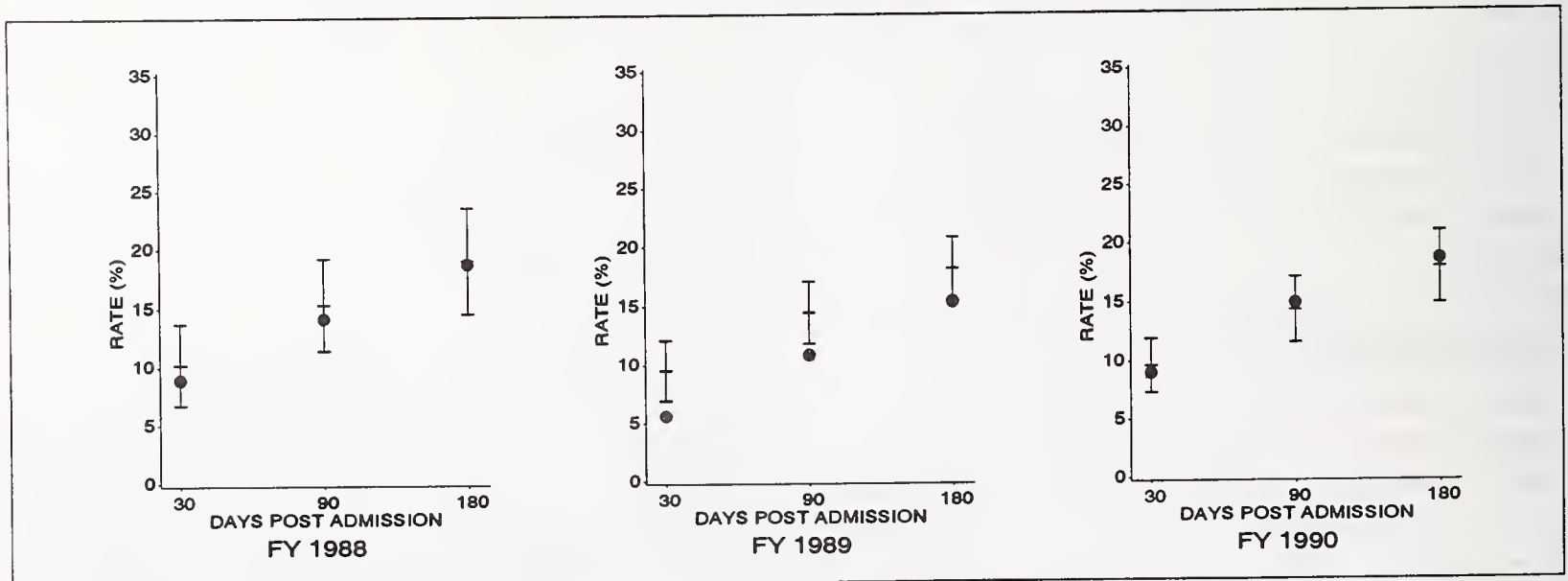
25 HIGHLAND AVE  
NEWBURYPORT, MA 01950  
Medicare Provider Number: 220029

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1084            | 9.0                 | 9.6  | 1.2   | 14.9    | 14.3 | 1.4   | 18.6     | 17.9 | 1.5   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 48              | 22.9                | 24.3 | ----- | 31.2    | 27.9 | ----- | 39.6     | 31.0 | ----- |
| Congestive Heart Failure.....              | 73              | 16.4                | 14.8 | 7.5   | 27.4    | 23.7 | 6.5   | 30.1     | 30.3 | 5.6   |
| Pneumonia/Influenza.....                   | 67              | 11.9                | 16.2 | 6.5   | 16.4    | 22.6 | 8.9   | 23.9     | 26.6 | 7.9   |
| Chronic Obstructive Pulmonary Disease..... | 20              | 15.0                | 6.6  | ----- | 25.0    | 10.9 | ----- | 30.0     | 14.8 | ----- |
| Transient Cerebral Ischemia.....           | 14              | 7.1                 | 1.5  | ----- | 7.1     | 3.6  | ----- | 7.1      | 6.0  | ----- |
| Stroke.....                                | 43              | 16.3                | 21.6 | ----- | 27.9    | 28.5 | ----- | 30.2     | 32.5 | ----- |
| Hip Fracture.....                          | 31              | 9.7                 | 5.3  | ----- | 12.9    | 9.6  | ----- | 19.4     | 12.8 | ----- |
| Sepsis.....                                | 8               | 25.0                | 20.5 | ----- | 25.0    | 28.5 | ----- | 25.0     | 33.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 14              | 0.0                 | 3.6  | ----- | 0.0     | 6.6  | ----- | 7.1      | 9.6  | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 15              | 6.7                 | 2.6  | ----- | 13.3    | 5.2  | ----- | 20.0     | 7.3  | ----- |
| Open Reduction of Hip Fracture.....        | 19              | 10.5                | 4.5  | ----- | 10.5    | 8.5  | ----- | 15.8     | 11.7 | ----- |
| Prostatectomy.....                         | 29              | 0.0                 | 0.8  | ----- | 0.0     | 1.8  | ----- | 3.4      | 3.0  | ----- |
| Cholecystectomy.....                       | 16              | 0.0                 | 1.9  | ----- | 0.0     | 3.7  | ----- | 0.0      | 5.5  | ----- |
| Hysterectomy.....                          | 3               | 0.0                 | 0.2  | ----- | 0.0     | 0.6  | ----- | 0.0      | 1.1  | ----- |

\* The Standard Deviation (SD) Is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# ANNA JAKUES HOSPITAL

Medicare Provider Number: 220029

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.8 years  
Proportion female..... 58.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 37.7 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 11.4 %  
Admitted for emergency..... 30.0 %

### COMORBIDITIES:

Cancer..... 8.2 %  
Chronic cardiovascular disease..... 41.1 %  
Chronic liver disease..... 0.7 %  
Chronic renal disease..... 2.2 %  
Chronic pulmonary disease..... 13.6 %  
Cerebrovascular degeneration..... 5.8 %  
Diabetes mellitus..... 7.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 83.6%  
State ..... 1.8%  
Outside State ..... 14.6%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.8 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 156  
Occupancy Rate ..... 59.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 33.7 %  
Case Mix Index (CMI) ..... 1.1244

### STAFFING:

Total Number of Physicians..... 69  
Percent of Physicians Board  
Certified Specialists ..... 81.2 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 122  
Licensed Practical Nurses ..... 24

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ATHOL MEMORIAL HOSPITAL

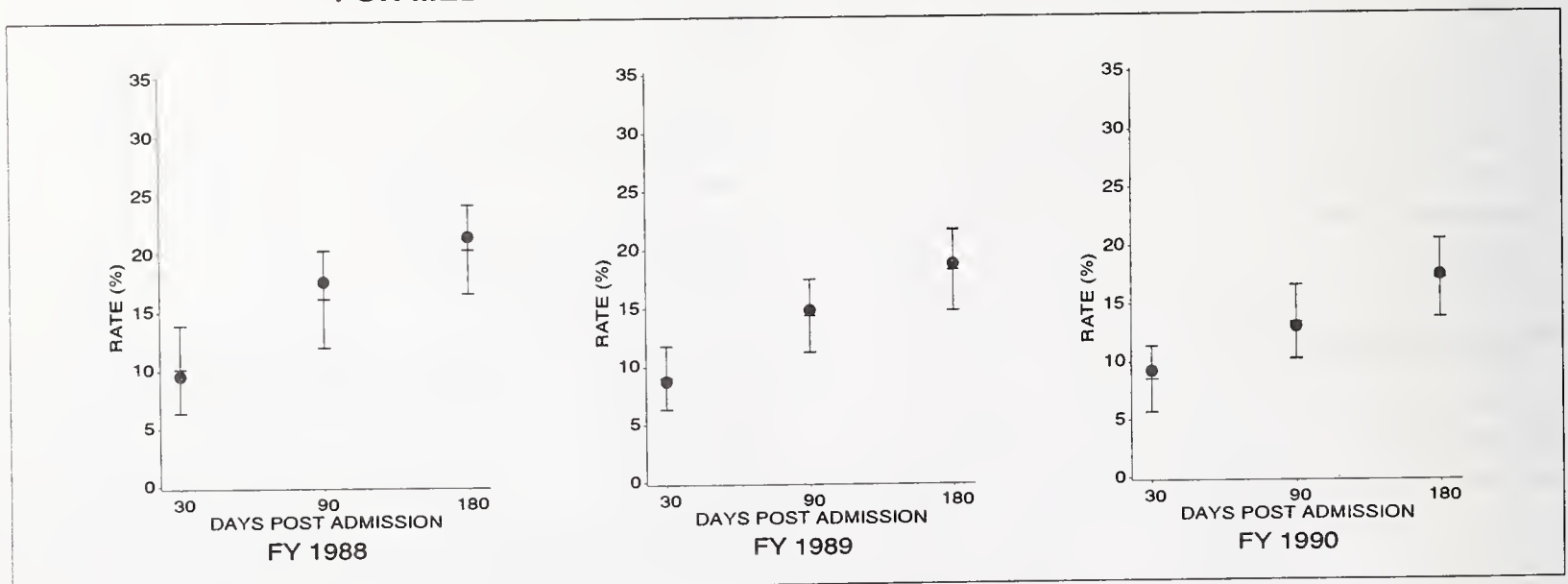
2033 MAIN STREET  
ATHOL, MA 01331  
Medicare Provider Number: 220003

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 610             | 9.2                 | 8.5  | 1.4  | 13.0    | 13.4 | 1.6  | 17.4     | 17.1 | 1.7  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 26              | 30.8                | 23.9 | ---- | 34.6    | 27.6 | ---- | 38.5     | 30.5 | ---- |
| Congestive Heart Failure.....              | 46              | 13.0                | 14.8 | ---- | 19.6    | 23.8 | ---- | 26.1     | 30.0 | ---- |
| Pneumonia/Influenza.....                   | 29              | 20.7                | 12.7 | ---- | 20.7    | 18.0 | ---- | 24.1     | 22.3 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 6               | 16.7                | 9.1  | ---- | 16.7    | 17.0 | ---- | 16.7     | 23.3 | ---- |
| Transient Cerebral Ischemia.....           | 16              | 0.0                 | 1.6  | ---- | 0.0     | 3.6  | ---- | 12.5     | 6.0  | ---- |
| Stroke.....                                | 19              | 26.3                | 22.3 | ---- | 31.6    | 28.9 | ---- | 31.6     | 33.0 | ---- |
| Hip Fracture.....                          | 16              | 6.3                 | 7.3  | ---- | 18.8    | 13.4 | ---- | 43.8     | 17.6 | ---- |
| Sepsis.....                                | 7               | 28.6                | 14.4 | ---- | 28.6    | 20.4 | ---- | 28.6     | 24.8 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 2               | 0.0                 | 2.8  | ---- | 50.0    | 5.8  | ---- | 50.0     | 8.4  | ---- |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 3               | 33.3                | 5.8  | ---- | 33.3    | 10.4 | ---- | 66.7     | 13.4 | ---- |
| Open Reduction of Hip Fracture.....        | 11              | 0.0                 | 5.9  | ---- | 9.1     | 11.5 | ---- | 27.3     | 15.5 | ---- |
| Prostatectomy.....                         | 1               | 0.0                 | 0.9  | ---- | 0.0     | 2.1  | ---- | 0.0      | 4.0  | ---- |
| Cholecystectomy.....                       | 9               | 0.0                 | 3.4  | ---- | 11.1    | 7.3  | ---- | 11.1     | 11.0 | ---- |
| Hysterectomy.....                          | 1               | 0.0                 | 0.1  | ---- | 0.0     | 0.2  | ---- | 0.0      | 0.3  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ATHOL MEMORIAL HOSPITAL

Medicare Provider Number: 220003

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.0 years  
Proportion female..... 60.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 94.1 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 0.5 %  
Admitted for emergency..... 0.3 %

### COMORBIDITIES:

Cancer..... 6.9 %  
Chronic cardiovascular disease..... 33.0 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 1.1 %  
Chronic pulmonary disease..... 15.9 %  
Cerebrovascular degeneration..... 6.6 %  
Diabetes mellitus..... 8.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 68.4%  
State ..... 28.8%  
Outside State ..... 2.8%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.5 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 52  
Occupancy Rate ..... 65.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 47.5 %  
Case Mix Index (CMI) ..... 1.0133

### STAFFING:

Total Number of Physicians..... 23  
Percent of Physicians Board  
Certified Specialists..... 52.2 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 40  
Licensed Practical Nurses ..... 11

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# ATLANTICARE MEDICAL CENTER INC

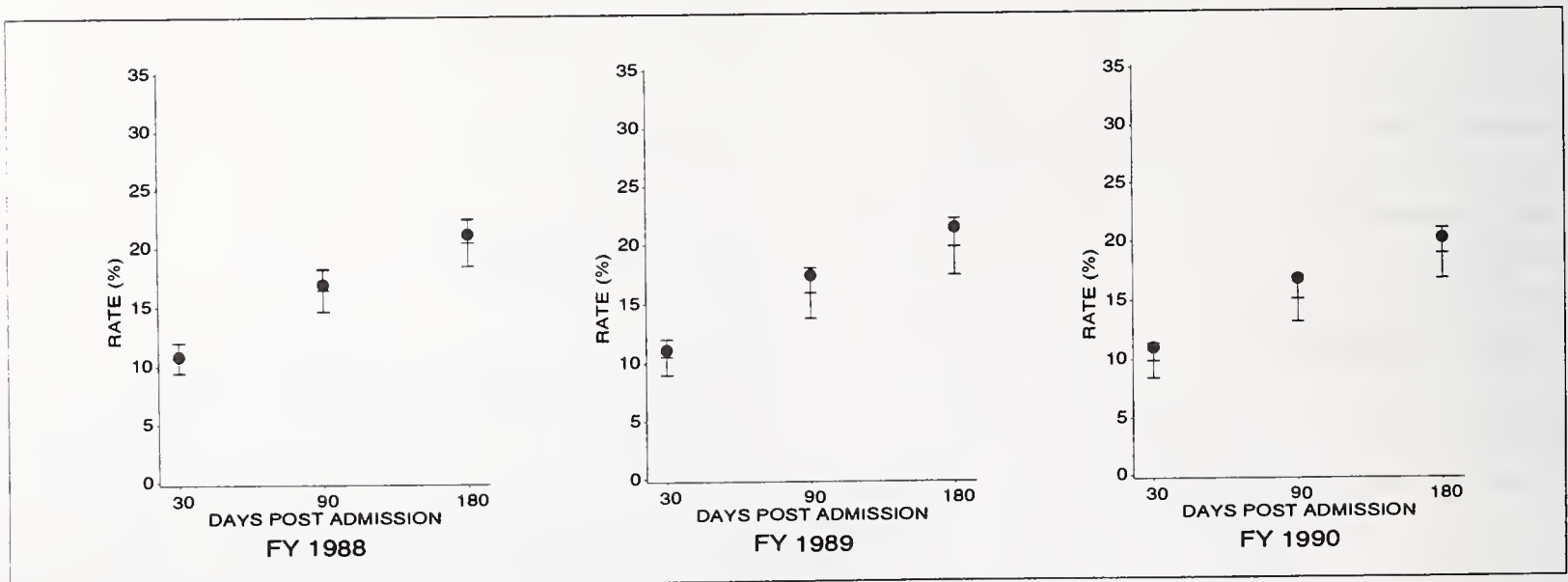
500 LYNNFIELD STREET  
LYNN, MA 01904  
Medicare Provider Number: 220035

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2720            | 11.0                | 9.9  | 0.7   | 16.8    | 15.1 | 1.0   | 20.2     | 18.9 | 1.1   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 131             | 18.3                | 24.7 | 5.3   | 26.7    | 28.6 | 5.6   | 30.5     | 31.7 | 4.3   |
| Congestive Heart Failure.....              | 126             | 25.4                | 16.1 | 5.1   | 33.3    | 25.2 | 5.1   | 38.1     | 31.6 | 5.6   |
| Pneumonia/Influenza.....                   | 159             | 20.8                | 17.2 | 5.2   | 26.4    | 23.2 | 5.1   | 29.6     | 27.2 | 4.8   |
| Chronic Obstructive Pulmonary Disease..... | 46              | 8.7                 | 8.0  | ----- | 17.4    | 13.9 | ----- | 21.7     | 18.5 | ----- |
| Transient Cerebral Ischemia.....           | 44              | 0.0                 | 1.9  | ----- | 2.3     | 4.3  | ----- | 2.3      | 6.9  | ----- |
| Stroke.....                                | 108             | 14.8                | 19.0 | 4.2   | 24.1    | 26.3 | 4.8   | 29.6     | 30.5 | 5.6   |
| Hip Fracture.....                          | 78              | 3.8                 | 7.9  | 4.3   | 7.7     | 14.1 | 6.1   | 9.0      | 18.2 | 6.9   |
| Sepsis.....                                | 22              | 27.3                | 23.1 | ----- | 40.9    | 29.5 | ----- | 45.5     | 33.6 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 17              | 5.9                 | 3.2  | ----- | 11.8    | 5.5  | ----- | 11.8     | 7.8  | ----- |
| Carotid Endarterectomy.....                | 15              | 0.0                 | 1.4  | ----- | 0.0     | 2.7  | ----- | 0.0      | 4.1  | ----- |
| Hip Replacement/Reconstruction.....        | 35              | 0.0                 | 3.2  | ----- | 2.9     | 5.9  | ----- | 2.9      | 7.9  | ----- |
| Open Reduction of Hip Fracture.....        | 52              | 5.8                 | 7.0  | 4.0   | 9.6     | 13.1 | 6.4   | 9.6      | 17.6 | 8.5   |
| Prostatectomy.....                         | 63              | 3.2                 | 1.1  | 2.2   | 4.8     | 2.6  | 2.7   | 6.3      | 4.3  | 3.1   |
| Cholecystectomy.....                       | 38              | 2.6                 | 4.0  | ----- | 7.9     | 7.4  | ----- | 7.9      | 9.8  | ----- |
| Hysterectomy.....                          | 12              | 0.0                 | 0.8  | ----- | 0.0     | 1.8  | ----- | 0.0      | 2.9  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ATLANTICARE MEDICAL CENTER INC

Medicare Provider Number: 220035

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.6 years  
Proportion female..... 59.3 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 34.7 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 13.9 %  
Admitted for emergency..... 60.1 %

### COMORBIDITIES:

Cancer..... 8.9 %  
Chronic cardiovascular disease..... 40.0 %  
Chronic liver disease..... 1.6 %  
Chronic renal disease..... 2.7 %  
Chronic pulmonary disease..... 17.6 %  
Cerebrovascular degeneration..... 5.7 %  
Diabetes mellitus..... 6.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 90.4%  
State ..... 7.9%  
Outside State ..... 1.7%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.4 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 511  
Ownership/Control..... Private, Non-Profit  
Case Mix Index (CMI) ..... 1.1799

### STAFFING:

Medical Residents/Interns ..... 5  
Registered Nurses..... 193  
Licensed Practical Nurses ..... 25

### SPECIALTY SERVICES:

Burn Unit ..... No  
Coronary Care Unit ..... Yes  
Hospice Care ..... No  
Intensive Care Unit ..... Yes  
Organ Transplant ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# BAYSTATE MEDICAL CENTER

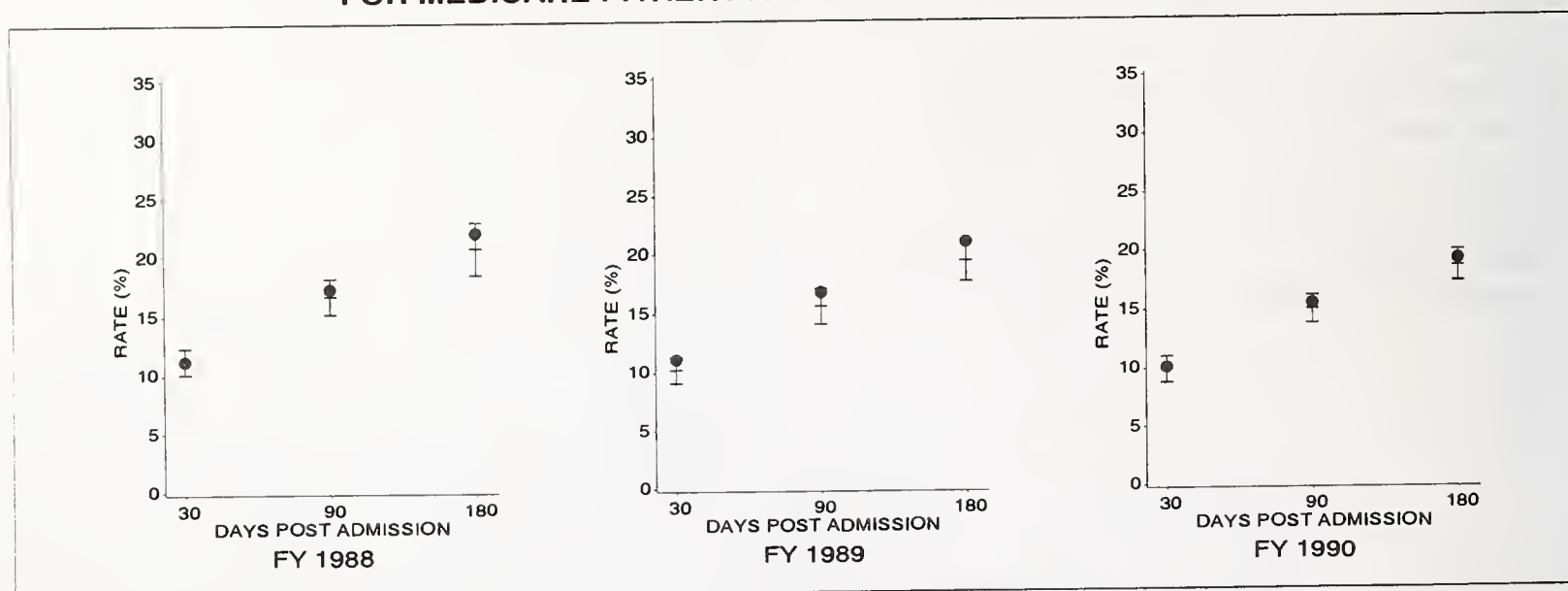
759 CHESTNUT ST  
SPRINGFIELD, MA 01107  
Medicare Provider Number: 220077

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 4821            | 10.1                | 9.9  | 0.6   | 15.5    | 15.0 | 0.6   | 19.2     | 18.6 | 0.7   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 228             | 14.0                | 20.4 | 4.3   | 18.4    | 23.7 | 4.4   | 21.9     | 26.5 | 4.1   |
| Congestive Heart Failure.....              | 235             | 14.0                | 14.7 | 3.2   | 20.4    | 23.4 | 4.7   | 27.7     | 29.8 | 4.3   |
| Pneumonia/Influenza.....                   | 180             | 20.6                | 17.0 | 5.1   | 28.3    | 23.0 | 6.2   | 32.8     | 27.0 | 6.2   |
| Chronic Obstructive Pulmonary Disease..... | 56              | 7.1                 | 9.1  | 4.4   | 14.3    | 14.4 | 4.7   | 16.1     | 18.4 | 7.2   |
| Transient Cerebral Ischemia.....           | 45              | 0.0                 | 2.5  | ----- | 0.0     | 5.5  | ----- | 2.2      | 8.5  | ----- |
| Stroke.....                                | 163             | 22.7                | 21.7 | 3.4   | 31.3    | 28.4 | 4.8   | 37.4     | 32.2 | 5.2   |
| Hip Fracture.....                          | 107             | 4.7                 | 6.5  | 3.0   | 11.2    | 11.5 | 3.4   | 14.0     | 15.1 | 3.8   |
| Sepsis.....                                | 27              | 37.0                | 23.0 | ----- | 48.1    | 31.0 | ----- | 48.1     | 35.1 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 133             | 5.3                 | 2.9  | 2.3   | 6.8     | 4.0  | 3.1   | 7.5      | 5.0  | 3.8   |
| Coronary Artery Bypass Graft.....          | 167             | 7.8                 | 6.5  | 2.1   | 9.6     | 9.2  | 2.3   | 10.2     | 10.2 | 2.5   |
| Initial Pacemaker Insertion.....           | 44              | 2.3                 | 3.0  | ----- | 4.5     | 5.6  | ----- | 6.8      | 8.1  | ----- |
| Carotid Endarterectomy.....                | 24              | 4.2                 | 1.4  | ----- | 4.2     | 2.6  | ----- | 8.3      | 3.8  | ----- |
| Hip Replacement/Reconstruction.....        | 80              | 2.5                 | 3.2  | 3.3   | 6.2     | 5.9  | 3.2   | 8.7      | 8.1  | 3.1   |
| Open Reduction of Hip Fracture.....        | 48              | 4.2                 | 5.5  | ----- | 10.4    | 10.2 | ----- | 12.5     | 13.8 | ----- |
| Prostatectomy.....                         | 90              | 0.0                 | 1.3  | 1.5   | 1.1     | 2.9  | 2.4   | 4.4      | 4.9  | 2.4   |
| Cholecystectomy.....                       | 67              | 3.0                 | 3.8  | 2.8   | 4.5     | 6.7  | 3.8   | 7.5      | 8.7  | 4.1   |
| Hysterectomy.....                          | 62              | 3.2                 | 1.1  | 2.7   | 3.2     | 2.5  | 2.5   | 4.8      | 3.9  | 3.1   |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# BAYSTATE MEDICAL CENTER

Medicare Provider Number: 220077

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.3 years  
Proportion female..... 52.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 43.6 %  
Transferred from skilled nursing facility..... 0.7 %  
Admitted for elective procedure..... 22.1 %  
Admitted for emergency..... 71.1 %

### COMORBIDITIES:

Cancer..... 9.3 %  
Chronic cardiovascular disease..... 40.4 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 5.2 %  
Chronic pulmonary disease..... 11.8 %  
Cerebrovascular degeneration..... 4.5 %  
Diabetes mellitus..... 10.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 84.1%  
State..... 10.1%  
Outside State..... 5.8%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 10.1 Days  
State..... 10.1 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 667  
Occupancy Rate..... 81.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges..... 25.3 %  
Case Mix Index (CMI)..... 1.6090

### STAFFING:

Total Number of Physicians..... 584  
Percent of Physicians Board  
Certified Specialists..... 80.3 %  
Medical Residents/Interns..... 156  
Registered Nurses..... 910  
Licensed Practical Nurses..... 150

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... Yes  
Comprehensive Geriatric..... No  
Hospice Care..... Yes  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... Yes  
Other Intensive Care..... No  
Trauma Center..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# BERKSHIRE MEDICAL CENTER

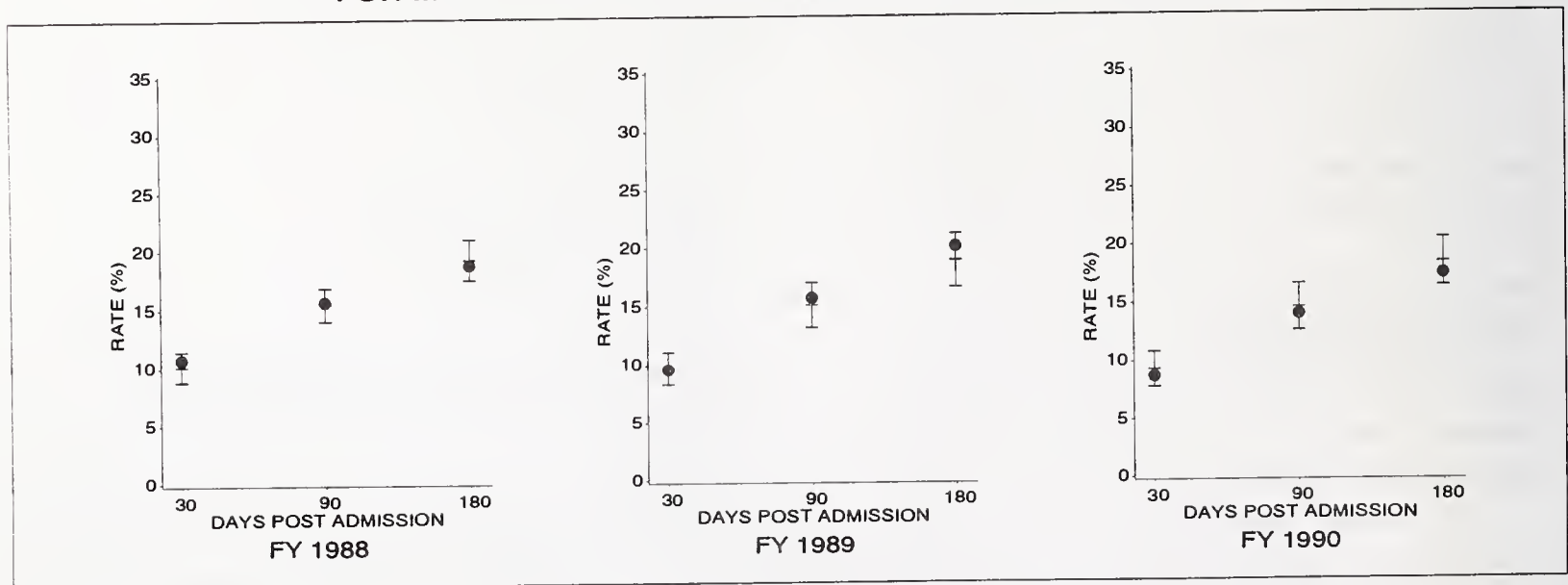
725 NORTH STREET  
PITTSFIELD, MA 01201  
Medicare Provider Number: 220046

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 2749            | 8.7                 | 9.3  | 0.8  | 14.0    | 14.6 | 1.0  | 17.4     | 18.4 | 1.0  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 83              | 26.5                | 28.5 | 6.3  | 27.7    | 31.4 | 6.6  | 33.7     | 34.0 | 6.7  |
| Congestive Heart Failure.....              | 118             | 14.4                | 15.1 | 3.4  | 26.3    | 23.7 | 4.1  | 31.4     | 30.1 | 4.3  |
| Pneumonia/Influenza.....                   | 118             | 14.4                | 14.0 | 3.7  | 16.1    | 19.8 | 4.1  | 18.6     | 23.7 | 4.8  |
| Chronic Obstructive Pulmonary Disease..... | 21              | 9.5                 | 8.2  | ---- | 14.3    | 13.9 | ---- | 23.8     | 18.5 | ---- |
| Transient Cerebral Ischemia.....           | 14              | 0.0                 | 1.6  | ---- | 0.0     | 3.5  | ---- | 7.1      | 5.7  | ---- |
| Stroke.....                                | 87              | 16.1                | 19.8 | 8.2  | 21.8    | 26.8 | 7.7  | 27.6     | 31.1 | 7.1  |
| Hip Fracture.....                          | 74              | 5.4                 | 8.2  | 5.6  | 8.1     | 14.4 | 8.0  | 10.8     | 18.5 | 8.8  |
| Sepsis.....                                | 32              | 21.9                | 23.5 | ---- | 28.1    | 32.7 | ---- | 37.5     | 38.0 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 39              | 7.7                 | 3.1  | ---- | 7.7     | 6.1  | ---- | 10.3     | 8.7  | ---- |
| Carotid Endarterectomy.....                | 8               | 0.0                 | 1.2  | ---- | 0.0     | 2.2  | ---- | 0.0      | 3.2  | ---- |
| Hip Replacement/Reconstruction.....        | 46              | 0.0                 | 4.5  | ---- | 4.3     | 8.0  | ---- | 10.9     | 10.4 | ---- |
| Open Reduction of Hip Fracture.....        | 20              | 5.0                 | 7.1  | ---- | 10.0    | 13.4 | ---- | 10.0     | 18.0 | ---- |
| Prostatectomy.....                         | 87              | 0.0                 | 1.1  | 1.5  | 1.1     | 2.6  | 2.3  | 3.4      | 4.4  | 2.9  |
| Cholecystectomy.....                       | 34              | 2.9                 | 2.9  | ---- | 5.9     | 5.4  | ---- | 8.8      | 7.3  | ---- |
| Hysterectomy.....                          | 13              | 0.0                 | 0.6  | ---- | 0.0     | 1.5  | ---- | 0.0      | 2.5  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# BERKSHIRE MEDICAL CENTER

Medicare Provider Number: 220046

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.0 years  
Proportion female..... 56.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 35.4 %  
Transferred from skilled nursing facility..... 1.3 %  
Admitted for elective procedure..... 23.4 %  
Admitted for emergency..... 13.2 %

### COMORBIDITIES:

Cancer..... 11.8 %  
Chronic cardiovascular disease..... 41.1 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 3.6 %  
Chronic pulmonary disease..... 12.9 %  
Cerebrovascular degeneration..... 4.8 %  
Diabetes mellitus..... 5.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 86.3%  
State ..... 2.3%  
Outside State ..... 11.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 11.0 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 313  
Occupancy Rate ..... 82.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 35.5 %  
Case Mix Index (CMI) ..... 1.3840

### STAFFING:

Total Number of Physicians..... (Not Available)  
Percent of Physicians Board  
Certified Specialists .....(Not Available)  
Medical Residents/Interns ..... 51  
Registered Nurses..... 304  
Licensed Practical Nurses ..... 47

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... Yes  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# BETH ISRAEL HOSPITAL

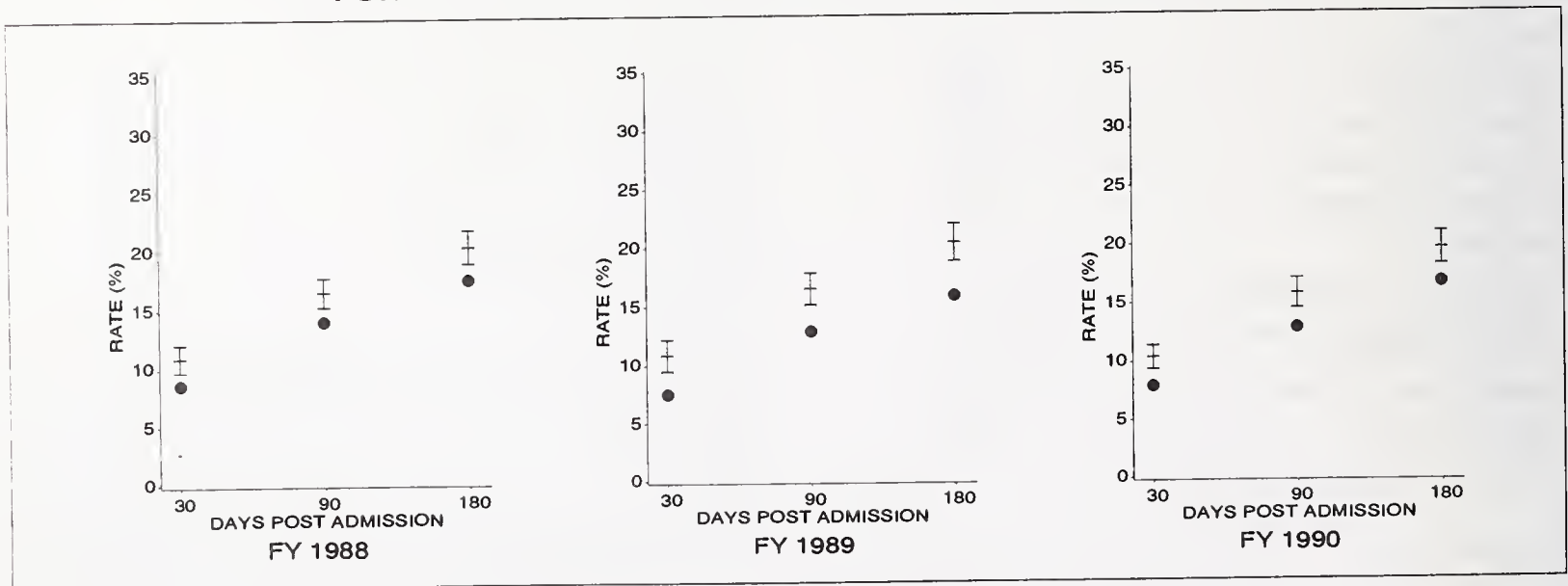
330 BROOKLINE AVE  
BOSTON, MA 02215  
Medicare Provider Number: 220086

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 4314            | 7.9                 | 10.4 | 0.5   | 12.9    | 15.8 | 0.6   | 16.7     | 19.6 | 0.7   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 133             | 25.6                | 24.5 | 3.9   | 32.3    | 28.6 | 4.6   | 34.6     | 31.7 | 4.6   |
| Congestive Heart Failure.....              | 206             | 15.5                | 17.0 | 2.9   | 28.2    | 26.7 | 3.5   | 32.5     | 33.3 | 3.3   |
| Pneumonia/Influenza.....                   | 145             | 11.0                | 20.8 | 4.7   | 17.2    | 28.1 | 5.1   | 22.8     | 32.9 | 5.3   |
| Chronic Obstructive Pulmonary Disease..... | 49              | 8.2                 | 8.0  | ----- | 12.2    | 14.1 | ----- | 24.5     | 18.9 | ----- |
| Transient Cerebral Ischemia.....           | 24              | 0.0                 | 1.8  | ----- | 0.0     | 4.1  | ----- | 0.0      | 6.6  | ----- |
| Stroke.....                                | 128             | 14.8                | 22.2 | 5.6   | 19.5    | 29.7 | 7.2   | 25.8     | 33.7 | 7.0   |
| Hip Fracture.....                          | 131             | 4.6                 | 7.9  | 3.8   | 10.7    | 14.1 | 4.9   | 13.7     | 18.2 | 4.8   |
| Sepsis.....                                | 60              | 21.7                | 26.3 | 8.2   | 28.3    | 34.0 | 8.1   | 33.3     | 38.4 | 8.7   |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 104             | 2.9                 | 2.8  | 1.7   | 3.8     | 4.0  | 2.2   | 4.8      | 5.2  | 2.8   |
| Coronary Artery Bypass Graft.....          | 149             | 6.7                 | 5.9  | 2.1   | 6.7     | 9.0  | 2.6   | 8.1      | 10.5 | 2.9   |
| Initial Pacemaker Insertion.....           | 32              | 3.1                 | 4.0  | ----- | 3.1     | 7.6  | ----- | 9.4      | 10.7 | ----- |
| Carotid Endarterectomy.....                | 10              | 0.0                 | 1.3  | ----- | 0.0     | 2.4  | ----- | 0.0      | 3.6  | ----- |
| Hip Replacement/Reconstruction.....        | 78              | 2.6                 | 6.0  | 3.4   | 7.7     | 11.2 | 4.0   | 9.0      | 14.8 | 5.0   |
| Open Reduction of Hip Fracture.....        | 47              | 6.4                 | 7.3  | ----- | 10.6    | 13.1 | ----- | 14.9     | 17.1 | ----- |
| Prostatectomy.....                         | 118             | 0.0                 | 1.0  | 1.2   | 0.0     | 2.3  | 2.4   | 0.8      | 4.0  | 3.2   |
| Cholecystectomy.....                       | 44              | 2.3                 | 3.2  | ----- | 2.3     | 5.8  | ----- | 2.3      | 7.5  | ----- |
| Hysterectomy.....                          | 47              | 0.0                 | 0.4  | ----- | 0.0     | 1.0  | ----- | 4.3      | 1.7  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# BETH ISRAEL HOSPITAL

Medicare Provider Number: 220086

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.2 years  
Proportion female..... 57.6 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 29.6 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 25.8 %  
Admitted for emergency..... 71.0 %

### COMORBIDITIES:

Cancer..... 10.3 %  
Chronic cardiovascular disease..... 39.2 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 4.5 %  
Chronic pulmonary disease..... 10.6 %  
Cerebrovascular degeneration..... 5.9 %  
Diabetes mellitus..... 6.1 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 41.0%  
State ..... 51.2%  
Outside State ..... 7.8%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.9 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 504  
Occupancy Rate ..... 82.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 28.7 %  
Case Mix Index (CMI) ..... 1.5494

### STAFFING:

Total Number of Physicians.....1091  
Percent of Physicians Board  
Certified Specialists ..... 85.5 %  
Medical Residents/Interns ..... 391  
Registered Nurses.....1061  
Licensed Practical Nurses ..... 5

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... No  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

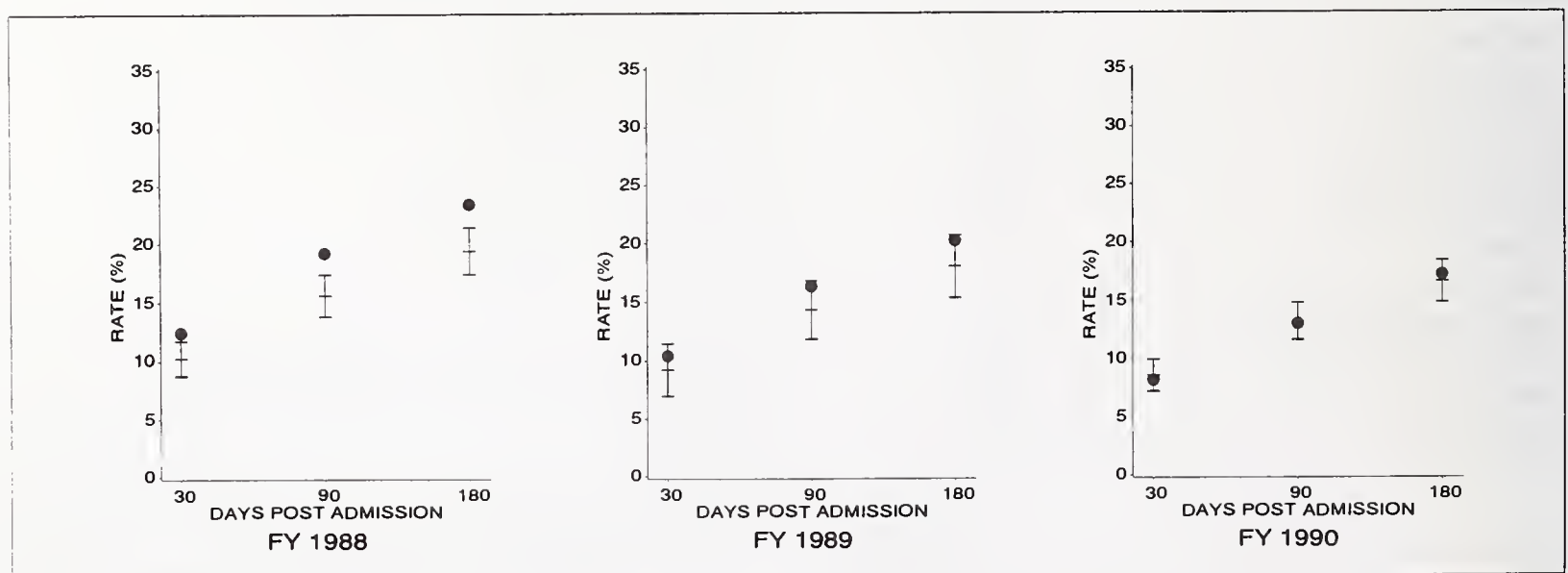
**BEVERLY HOSPITAL**  
HERRICK & HEATHER STS  
BEVERLY, MA 01915  
Medicare Provider Number: 220033

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1873            | 8.2                 | 8.6  | 0.7   | 13.0    | 13.2 | 0.8   | 17.2     | 16.6 | 0.9   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 56              | 17.9                | 26.7 | 7.2   | 23.2    | 29.5 | 6.7   | 26.8     | 32.4 | 6.8   |
| Congestive Heart Failure.....              | 78              | 14.1                | 13.1 | 3.9   | 20.5    | 20.9 | 8.0   | 29.5     | 27.1 | 10.4  |
| Pneumonia/Influenza.....                   | 100             | 11.0                | 14.4 | 6.3   | 17.0    | 19.8 | 5.8   | 22.0     | 23.6 | 5.1   |
| Chronic Obstructive Pulmonary Disease..... | 19              | 10.5                | 8.2  | ----- | 21.1    | 13.6 | ----- | 31.6     | 18.1 | ----- |
| Transient Cerebral Ischemia.....           | 33              | 3.0                 | 1.7  | ----- | 6.1     | 3.9  | ----- | 12.1     | 6.5  | ----- |
| Stroke.....                                | 76              | 13.2                | 19.4 | 8.1   | 19.7    | 26.3 | 8.9   | 23.7     | 30.2 | 9.6   |
| Hip Fracture.....                          | 90              | 5.6                 | 5.8  | 2.7   | 10.0    | 10.5 | 4.0   | 14.4     | 13.7 | 6.5   |
| Sepsis.....                                | 13              | 23.1                | 22.3 | ----- | 23.1    | 28.6 | ----- | 23.1     | 34.0 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 1               | 0.0                 | 5.3  | ----- | 0.0     | 6.5  | ----- | 0.0      | 7.4  | ----- |
| Initial Pacemaker Insertion.....           | 10              | 10.0                | 4.2  | ----- | 10.0    | 7.0  | ----- | 10.0     | 9.7  | ----- |
| Carotid Endarterectomy.....                | 4               | 0.0                 | 0.9  | ----- | 0.0     | 1.8  | ----- | 25.0     | 2.7  | ----- |
| Hip Replacement/Reconstruction.....        | 48              | 2.1                 | 3.2  | ----- | 2.1     | 6.0  | ----- | 4.2      | 8.2  | ----- |
| Open Reduction of Hip Fracture.....        | 41              | 7.3                 | 6.2  | ----- | 17.1    | 11.2 | ----- | 22.0     | 14.6 | ----- |
| Prostatectomy.....                         | 67              | 3.0                 | 0.7  | 1.4   | 9.0     | 1.8  | 3.9   | 10.4     | 3.1  | 3.4   |
| Cholecystectomy.....                       | 37              | 0.0                 | 1.8  | ----- | 0.0     | 3.7  | ----- | 0.0      | 5.4  | ----- |
| Hysterectomy.....                          | 19              | 0.0                 | 0.3  | ----- | 0.0     | 0.7  | ----- | 5.3      | 1.3  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**





**BEVERLY HOSPITAL**  
Medicare Provider Number: 220033

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 75.9 years  
Proportion female..... 60.3 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 45.5 %  
Transferred from skilled nursing facility..... 0.2 %  
Admitted for elective procedure..... 15.4 %  
Admitted for emergency..... 50.5 %

**COMORBIDITIES:**

Cancer..... 5.9 %  
Chronic cardiovascular disease..... 26.3 %  
Chronic liver disease..... 1.0 %  
Chronic renal disease..... 4.9 %  
Chronic pulmonary disease..... 13.2 %  
Cerebrovascular degeneration..... 4.8 %  
Diabetes mellitus..... 6.5 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 92.8%  
State ..... 3.7%  
Outside State ..... 3.5%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 11.4 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 234  
Occupancy Rate ..... 76.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 30.8 %  
Case Mix Index (CMI) ..... 1.1631

**STAFFING:**

Total Number of Physicians..... 248  
Percent of Physicians Board  
Certified Specialists ..... 79.4 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 324  
Licensed Practical Nurses ..... 35

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# BOSTON CITY HOSPITAL

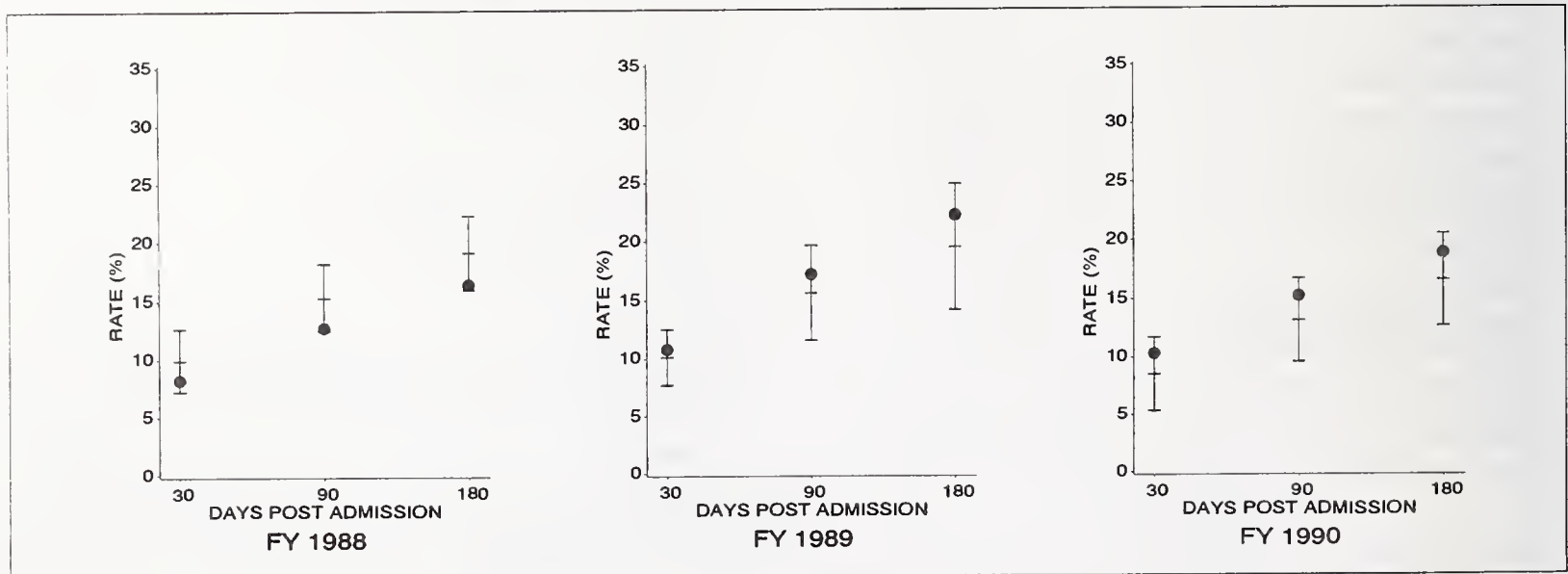
818 HARRISON AVE  
BOSTON, MA 02118  
Medicare Provider Number: 220104

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 824             | 10.3                | 8.5  | 1.6   | 15.2    | 13.1 | 1.8   | 18.8     | 16.5 | 2.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 18              | 22.2                | 25.0 | ----- | 38.9    | 28.2 | ----- | 44.4     | 31.1 | ----- |
| Congestive Heart Failure.....              | 37              | 18.9                | 15.6 | ----- | 18.9    | 24.2 | ----- | 24.3     | 31.0 | ----- |
| Pneumonia/Influenza.....                   | 40              | 20.0                | 14.1 | ----- | 22.5    | 19.6 | ----- | 27.5     | 23.2 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 12              | 8.3                 | 8.1  | ----- | 16.7    | 14.8 | ----- | 16.7     | 19.2 | ----- |
| Transient Cerebral Ischemia.....           | 5               | 0.0                 | 1.2  | ----- | 0.0     | 2.7  | ----- | 20.0     | 4.3  | ----- |
| Stroke.....                                | 27              | 18.5                | 17.8 | ----- | 33.3    | 24.7 | ----- | 33.3     | 28.6 | ----- |
| Hip Fracture.....                          | 11              | 9.1                 | 4.8  | ----- | 9.1     | 9.1  | ----- | 9.1      | 12.1 | ----- |
| Sepsis.....                                | 5               | 40.0                | 21.9 | ----- | 40.0    | 29.4 | ----- | 40.0     | 34.6 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 5               | 0.0                 | 2.7  | ----- | 0.0     | 6.1  | ----- | 0.0      | 9.6  | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 2               | 0.0                 | 5.4  | ----- | 0.0     | 11.1 | ----- | 0.0      | 15.1 | ----- |
| Open Reduction of Hip Fracture.....        | 8               | 12.5                | 4.0  | ----- | 12.5    | 7.8  | ----- | 12.5     | 10.8 | ----- |
| Prostatectomy.....                         | 30              | 0.0                 | 0.7  | ----- | 0.0     | 1.8  | ----- | 0.0      | 3.1  | ----- |
| Cholecystectomy.....                       | 11              | 0.0                 | 2.9  | ----- | 0.0     | 6.0  | ----- | 0.0      | 8.3  | ----- |
| Hysterectomy.....                          | 3               | 0.0                 | 0.2  | ----- | 0.0     | 0.4  | ----- | 0.0      | 0.7  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# BOSTON CITY HOSPITAL

Medicare Provider Number: 220104

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

|                                                |            |                                     |        |
|------------------------------------------------|------------|-------------------------------------|--------|
| <b>DEMOGRAPHICS:</b>                           |            | <b>COMORBIDITIES:</b>               |        |
| Average age at admission.....                  | 68.5 years | Cancer.....                         | 5.7 %  |
| Proportion female.....                         | 44.1 %     | Chronic cardiovascular disease..... | 26.2 % |
| <b>ADMISSION SOURCES/TYPES:</b>                |            | Chronic liver disease.....          | 1.9 %  |
| Referred by personal or HMO physician.....     | 1.1 %      | Chronic renal disease.....          | 4.4 %  |
| Transferred from skilled nursing facility..... | 0.5 %      | Chronic pulmonary disease.....      | 16.7 % |
| Admitted for elective procedure.....           | 14.7 %     | Cerebrovascular degeneration.....   | 14.8 % |
| Admitted for emergency.....                    | 71.7 %     | Diabetes mellitus.....              | 10.7 % |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

|                                              |        |                                         |           |
|----------------------------------------------|--------|-----------------------------------------|-----------|
| <b>ORIGIN OF MEDICARE PATIENT ADMISSION:</b> |        | <b>MEDICARE AVERAGE LENGTH OF STAY:</b> |           |
| County/City .....                            | 89.4%  | Hospital .....                          | 9.8 Days  |
| State .....                                  | 7.6%   | State .....                             | 10.1 Days |
| Outside State .....                          | 3.0%   | National .....                          | 8.6 Days  |
| Total .....                                  | 100.0% |                                         |           |

## HOSPITAL CHARACTERISTICS\*

|                                                                    |                  |                                                 |     |
|--------------------------------------------------------------------|------------------|-------------------------------------------------|-----|
| <b>SOURCE: AHA Annual Survey of Hospitals** - Survey Year 1990</b> |                  |                                                 |     |
| <b>PROFILE:</b>                                                    |                  | <b>SPECIALTY SERVICES:</b>                      |     |
| Total Beds .....                                                   | 355              | Burn Unit .....                                 | No  |
| Occupancy Rate .....                                               | 74.0 %           | Cardiac Intensive Care .....                    | Yes |
| Ownership/Control.....                                             | Local Government | Comprehensive Geriatric .....                   | Yes |
| Medicare Discharges .....                                          | (Not Available)  | Hospice Care .....                              | No  |
| Case Mix Index (CMI) .....                                         | 1.1877           | Medical/Surgical Intensive Care .....           | Yes |
| <b>STAFFING:</b>                                                   |                  | Organ/Tissue Transplant .....                   | No  |
| Total Number of Physicians.....                                    | 606              | Other Intensive Care .....                      | No  |
| Percent of Physicians Board<br>Certified Specialists .....         | 73.4 %           | Trauma Center .....                             | Yes |
| Medical Residents/Interns .....                                    | 239              | <b>OTHER SPECIALTY/HOSPITAL-BASED SERVICES:</b> |     |
| Registered Nurses.....                                             | 599              | Alcohol/Drug .....                              | No  |
| Licensed Practical Nurses .....                                    | 71               | Rehabilitation.....                             | No  |
|                                                                    |                  | Psychiatric .....                               | Yes |
|                                                                    |                  | Medicare Swing Beds .....                       | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates



# BRIGHAM AND WOMANS HOSPITAL

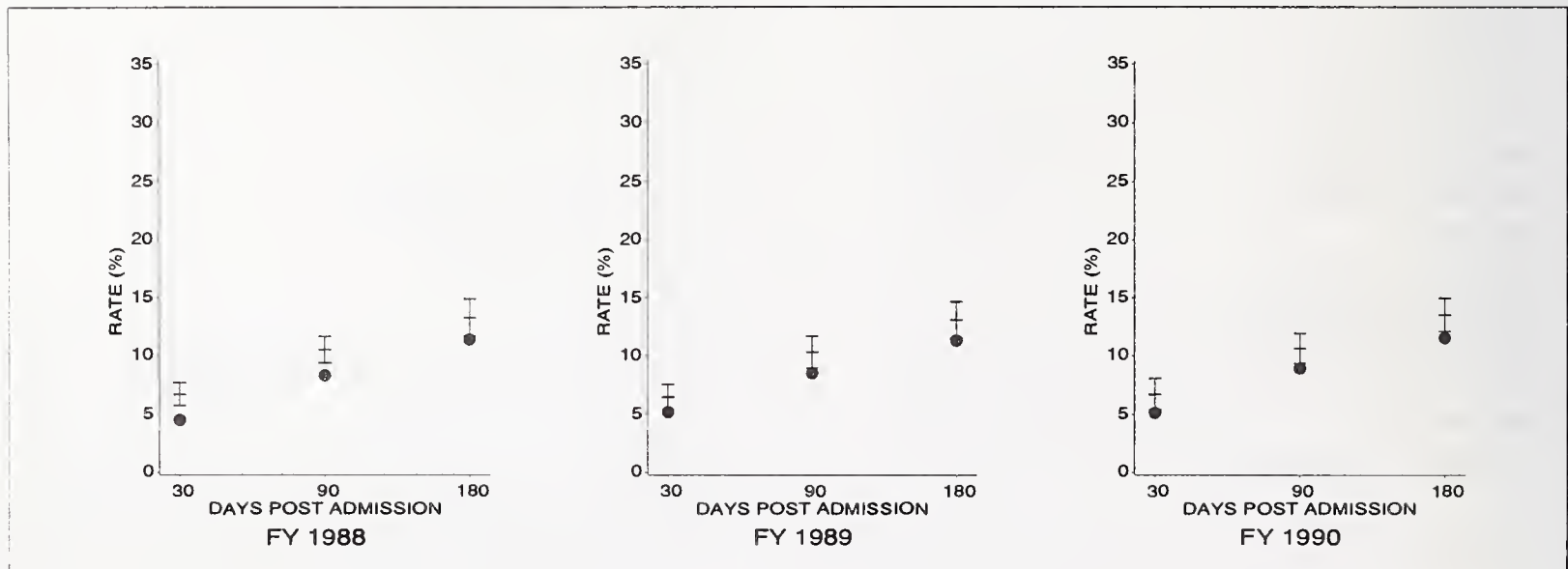
75 FRANCIS ST  
BOSTON, MA 02115  
Medicare Provider Number: 220110

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 3552            | 5.1                 | 6.7  | 0.7   | 8.9     | 10.6 | 0.6   | 11.5     | 13.5 | 0.7   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 56              | 21.4                | 28.4 | 11.8  | 23.2    | 32.2 | 12.7  | 25.0     | 35.1 | 12.6  |
| Congestive Heart Failure.....              | 77              | 5.2                 | 15.1 | 6.7   | 14.3    | 24.4 | 7.7   | 19.5     | 30.9 | 8.4   |
| Pneumonia/Influenza.....                   | 73              | 4.1                 | 13.8 | 6.3   | 13.7    | 19.0 | 6.9   | 16.4     | 22.4 | 6.2   |
| Chronic Obstructive Pulmonary Disease..... | 35              | 11.4                | 10.8 | ----- | 22.9    | 18.2 | ----- | 22.9     | 23.5 | ----- |
| Transient Cerebral Ischemia.....           | 27              | 0.0                 | 1.5  | ----- | 3.7     | 3.3  | ----- | 7.4      | 5.3  | ----- |
| Stroke.....                                | 73              | 12.3                | 19.3 | 5.8   | 16.4    | 25.1 | 6.4   | 19.2     | 28.8 | 7.2   |
| Hip Fracture.....                          | 49              | 2.0                 | 6.1  | ----- | 2.0     | 10.7 | ----- | 4.1      | 13.8 | ----- |
| Sepsis.....                                | 12              | 25.0                | 27.0 | ----- | 33.3    | 35.2 | ----- | 41.7     | 39.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 38              | 0.0                 | 2.7  | ----- | 0.0     | 3.7  | ----- | 0.0      | 4.6  | ----- |
| Coronary Artery Bypass Graft.....          | 168             | 7.1                 | 5.1  | 2.2   | 10.1    | 8.1  | 2.3   | 10.1     | 9.6  | 2.3   |
| Initial Pacemaker Insertion.....           | 14              | 0.0                 | 2.8  | ----- | 0.0     | 5.5  | ----- | 0.0      | 7.8  | ----- |
| Carotid Endarterectomy.....                | 20              | 0.0                 | 1.1  | ----- | 0.0     | 2.1  | ----- | 0.0      | 3.2  | ----- |
| Hip Replacement/Reconstruction.....        | 156             | 1.3                 | 1.2  | 0.9   | 1.3     | 2.1  | 1.3   | 1.9      | 2.9  | 1.6   |
| Open Reduction of Hip Fracture.....        | 24              | 0.0                 | 5.7  | ----- | 0.0     | 10.5 | ----- | 0.0      | 13.9 | ----- |
| Prostatectomy.....                         | 64              | 0.0                 | 0.6  | 1.3   | 1.6     | 1.4  | 1.5   | 3.1      | 2.4  | 2.1   |
| Cholecystectomy.....                       | 39              | 2.6                 | 2.9  | ----- | 5.1     | 5.7  | ----- | 5.1      | 7.9  | ----- |
| Hysterectomy.....                          | 67              | 0.0                 | 0.6  | 1.1   | 3.0     | 1.4  | 2.1   | 3.0      | 2.2  | 1.9   |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# BRIGHAM AND WOMANS HOSPITAL

Medicare Provider Number: 220110

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 70.4 years |
| Proportion female.....        | 57.2 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 53.7 % |
| Transferred from skilled nursing facility..... | 0.2 %  |
| Admitted for elective procedure.....           | 49.7 % |
| Admitted for emergency.....                    | 35.2 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 8.1 %  |
| Chronic cardiovascular disease..... | 33.4 % |
| Chronic liver disease.....          | 0.9 %  |
| Chronic renal disease.....          | 6.0 %  |
| Chronic pulmonary disease.....      | 6.9 %  |
| Cerebrovascular degeneration.....   | 3.8 %  |
| Diabetes mellitus.....              | 5.8 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 28.7%  |
| State .....         | 56.9%  |
| Outside State ..... | 14.4%  |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |           |
|----------------|-----------|
| Hospital ..... | 9.3 Days  |
| State .....    | 10.1 Days |
| National ..... | 8.6 Days  |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 726                 |
| Occupancy Rate .....       | 84.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 16.8 %              |
| Case Mix Index (CMI) ..... | 1.8992              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 1046   |
| Percent of Physicians Board<br>Certified Specialists ..... | 32.0 % |
| Medical Residents/Interns .....                            | 443    |
| Registered Nurses.....                                     | 1039   |
| Licensed Practical Nurses.....                             | 48     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | Yes |
| Cardiac Intensive Care .....          | Yes |
| Comprehensive Geriatric .....         | Yes |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | Yes |
| Other Intensive Care .....            | Yes |
| Trauma Center .....                   | Yes |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates

# BROCKTON HOSPITAL

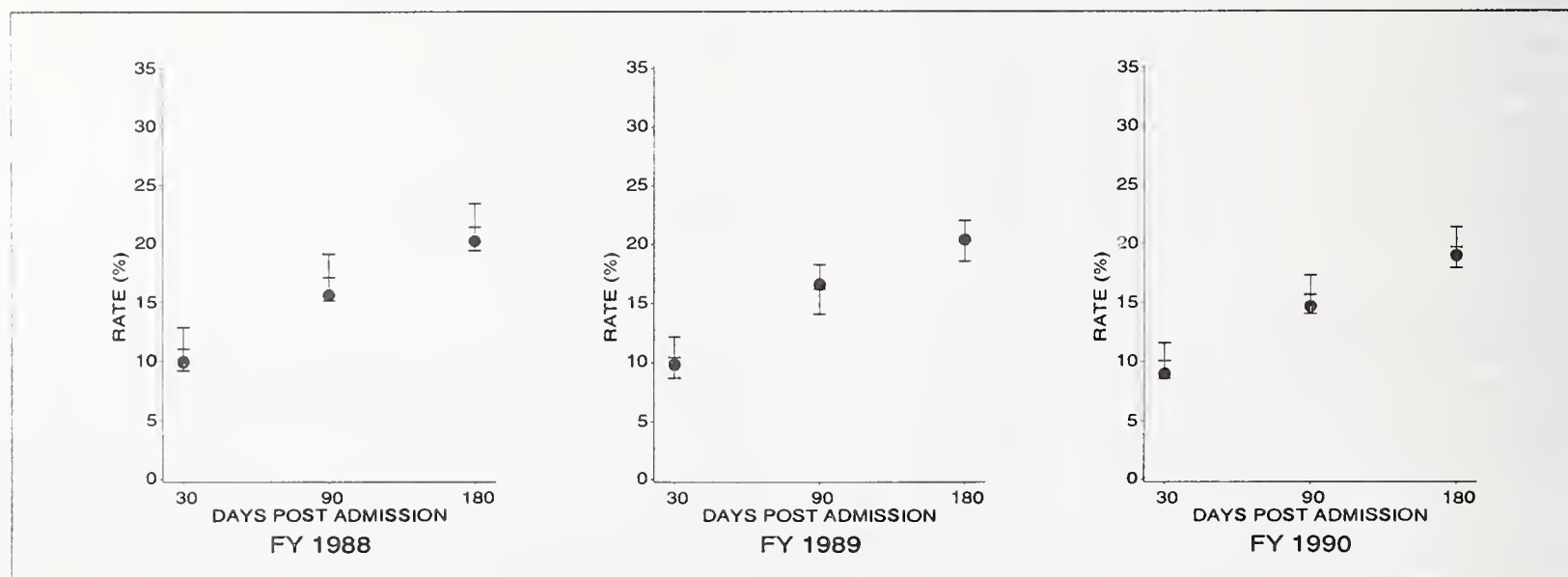
680 CENTER STREET  
BROCKTON, MA 02402  
Medicare Provider Number: 220052

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2369               | 9.0                 | 10.1 | 0.8   | 14.7    | 15.7 | 0.8   | 19.0     | 19.7 | 0.9   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 89                 | 25.8                | 22.8 | 6.2   | 29.2    | 26.5 | 6.9   | 32.6     | 29.4 | 5.9   |
| Congestive Heart Failure.....              | 120                | 14.2                | 15.5 | 4.4   | 25.0    | 24.8 | 4.1   | 39.2     | 31.3 | 5.6   |
| Pneumonia/Influenza.....                   | 165                | 15.8                | 17.1 | 3.1   | 23.0    | 23.8 | 3.4   | 24.8     | 28.1 | 3.8   |
| Chronic Obstructive Pulmonary Disease..... | 50                 | 6.0                 | 9.1  | ----- | 12.0    | 15.9 | ----- | 16.0     | 20.6 | ----- |
| Transient Cerebral Ischemia.....           | 43                 | 0.0                 | 2.1  | ----- | 9.3     | 4.7  | ----- | 9.3      | 7.6  | ----- |
| Stroke.....                                | 81                 | 24.7                | 21.3 | 4.8   | 34.6    | 28.8 | 6.7   | 40.7     | 32.9 | 6.5   |
| Hip Fracture.....                          | 51                 | 0.0                 | 5.9  | 5.0   | 9.8     | 11.0 | 6.1   | 15.7     | 14.6 | 5.7   |
| Sepsis.....                                | 18                 | 27.8                | 23.8 | ----- | 33.3    | 32.3 | ----- | 44.4     | 37.4 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 16                 | 6.3                 | 4.5  | ----- | 6.3     | 8.0  | ----- | 6.3      | 10.8 | ----- |
| Carotid Endarterectomy.....                | 3                  | 0.0                 | 1.2  | ----- | 0.0     | 2.1  | ----- | 0.0      | 3.1  | ----- |
| Hip Replacement/Reconstruction.....        | 26                 | 0.0                 | 3.8  | ----- | 3.8     | 7.2  | ----- | 3.8      | 10.0 | ----- |
| Open Reduction of Hip Fracture.....        | 28                 | 0.0                 | 5.9  | ----- | 14.3    | 11.2 | ----- | 25.0     | 14.9 | ----- |
| Prostatectomy.....                         | 78                 | 0.0                 | 0.9  | 3.3   | 3.8     | 2.1  | 2.9   | 5.1      | 3.7  | 3.6   |
| Cholecystectomy.....                       | 36                 | 5.6                 | 3.0  | ----- | 8.3     | 5.7  | ----- | 8.3      | 7.7  | ----- |
| Hysterectomy.....                          | 22                 | 0.0                 | 0.5  | ----- | 0.0     | 1.3  | ----- | 4.5      | 2.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# BROCKTON HOSPITAL

Medicare Provider Number: 220052

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.0 years  
 Proportion female..... 61.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 26.3 %  
 Transferred from skilled nursing facility..... 0.1 %  
 Admitted for elective procedure..... 11.2 %  
 Admitted for emergency..... 64.8 %

### COMORBIDITIES:

Cancer..... 8.5 %  
 Chronic cardiovascular disease..... 34.9 %  
 Chronic liver disease..... 1.2 %  
 Chronic renal disease..... 3.5 %  
 Chronic pulmonary disease..... 21.4 %  
 Cerebrovascular degeneration..... 6.7 %  
 Diabetes mellitus..... 8.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 80.6%  
 State ..... 17.1%  
 Outside State ..... 2.3%  
 Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 11.3 Days  
 State ..... 10.1 Days  
 National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 301  
 Occupancy Rate ..... 75.0 %  
 Ownership/Control..... Private, Non-Profit  
 Medicare Discharges ..... 37.8 %  
 Case Mix Index (CMI) ..... 1.2129

### STAFFING:

Total Number of Physicians..... 158  
 Percent of Physicians Board  
 Certified Specialists ..... 85.4 %  
 Medical Residents/Interns ..... 0  
 Registered Nurses..... 274  
 Licensed Practical Nurses ..... 19

### SPECIALTY SERVICES:

Burn Unit ..... No  
 Cardiac Intensive Care ..... No  
 Comprehensive Geriatric ..... No  
 Hospice Care ..... No  
 Medical/Surgical Intensive Care ..... Yes  
 Organ/Tissue Transplant ..... No  
 Other Intensive Care ..... No  
 Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
 Rehabilitation..... No  
 Psychiatric ..... Yes  
 Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# BURBANK HOSPITAL

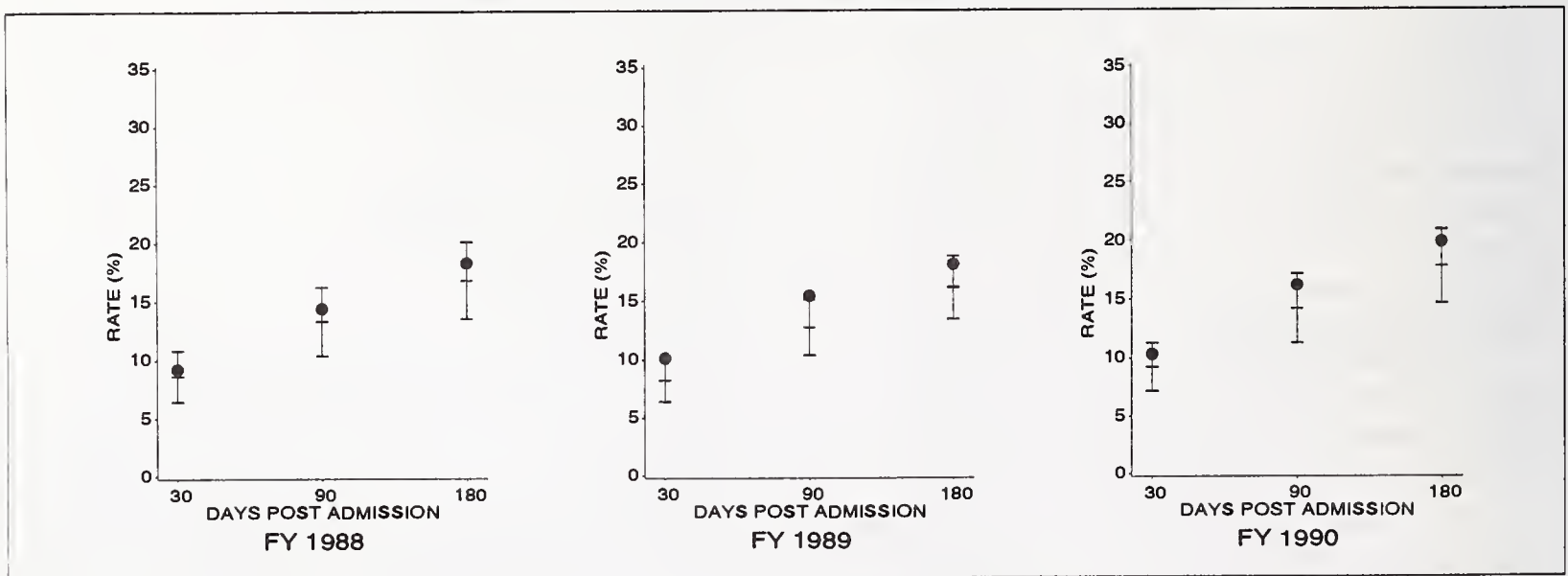
NICHOLS RD  
FITCHBURG, MA 01420  
Medicare Provider Number: 220001

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1484            | 10.3                | 9.2  | 1.0   | 16.2    | 14.2 | 1.5   | 19.9     | 17.8 | 1.6   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 49              | 30.6                | 23.2 | ----- | 34.7    | 25.7 | ----- | 40.8     | 28.1 | ----- |
| Congestive Heart Failure.....              | 92              | 16.3                | 15.5 | 3.9   | 28.3    | 24.7 | 5.9   | 32.6     | 31.0 | 5.7   |
| Pneumonia/Influenza.....                   | 55              | 23.6                | 16.2 | 10.2  | 30.9    | 22.2 | 10.1  | 32.7     | 26.1 | 9.8   |
| Chronic Obstructive Pulmonary Disease..... | 11              | 0.0                 | 7.9  | ----- | 0.0     | 13.7 | ----- | 0.0      | 18.0 | ----- |
| Transient Cerebral Ischemia.....           | 22              | 4.5                 | 1.8  | ----- | 9.1     | 4.0  | ----- | 13.6     | 6.3  | ----- |
| Stroke.....                                | 60              | 20.0                | 20.8 | 5.4   | 31.7    | 28.1 | 6.5   | 38.3     | 32.1 | 7.9   |
| Hip Fracture.....                          | 55              | 14.5                | 6.8  | 4.8   | 29.1    | 11.9 | 8.8   | 29.1     | 15.4 | 7.8   |
| Sepsis.....                                | 16              | 37.5                | 24.3 | ----- | 37.5    | 31.6 | ----- | 37.5     | 35.8 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 6               | 0.0                 | 1.6  | ----- | 0.0     | 3.9  | ----- | 16.7     | 6.7  | ----- |
| Carotid Endarterectomy.....                | 2               | 0.0                 | 0.7  | ----- | 0.0     | 1.7  | ----- | 0.0      | 2.9  | ----- |
| Hip Replacement/Reconstruction.....        | 33              | 0.0                 | 3.2  | ----- | 9.1     | 6.1  | ----- | 9.1      | 8.3  | ----- |
| Open Reduction of Hip Fracture.....        | 31              | 16.1                | 7.4  | ----- | 35.5    | 13.5 | ----- | 35.5     | 17.8 | ----- |
| Prostatectomy.....                         | 31              | 0.0                 | 0.8  | ----- | 0.0     | 2.0  | ----- | 0.0      | 3.4  | ----- |
| Cholecystectomy.....                       | 25              | 4.0                 | 1.9  | ----- | 8.0     | 3.9  | ----- | 8.0      | 5.3  | ----- |
| Hysterectomy.....                          | 10              | 0.0                 | 0.1  | ----- | 0.0     | 0.3  | ----- | 0.0      | 0.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



**BURBANK HOSPITAL**  
Medicare Provider Number: 220001

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 75.6 years  
Proportion female..... 55.5 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 35.5 %  
Transferred from skilled nursing facility..... 0.3 %  
Admitted for elective procedure..... 17.7 %  
Admitted for emergency..... 58.5 %

**COMORBIDITIES:**

Cancer..... 6.9 %  
Chronic cardiovascular disease..... 28.1 %  
Chronic liver disease..... 1.0 %  
Chronic renal disease..... 3.9 %  
Chronic pulmonary disease..... 10.5 %  
Cerebrovascular degeneration..... 5.9 %  
Diabetes mellitus..... 4.8 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 87.2%  
State ..... 8.6%  
Outside State ..... 4.2%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 8.8 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 204  
Occupancy Rate ..... 58.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 36.3 %  
Case Mix Index (CMI) ..... 1.1548

**STAFFING:**

Total Number of Physicians..... 119  
Percent of Physicians Board  
Certified Specialists ..... 88.2 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 159  
Licensed Practical Nurses ..... 34

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# CAPE COD HOSPITAL

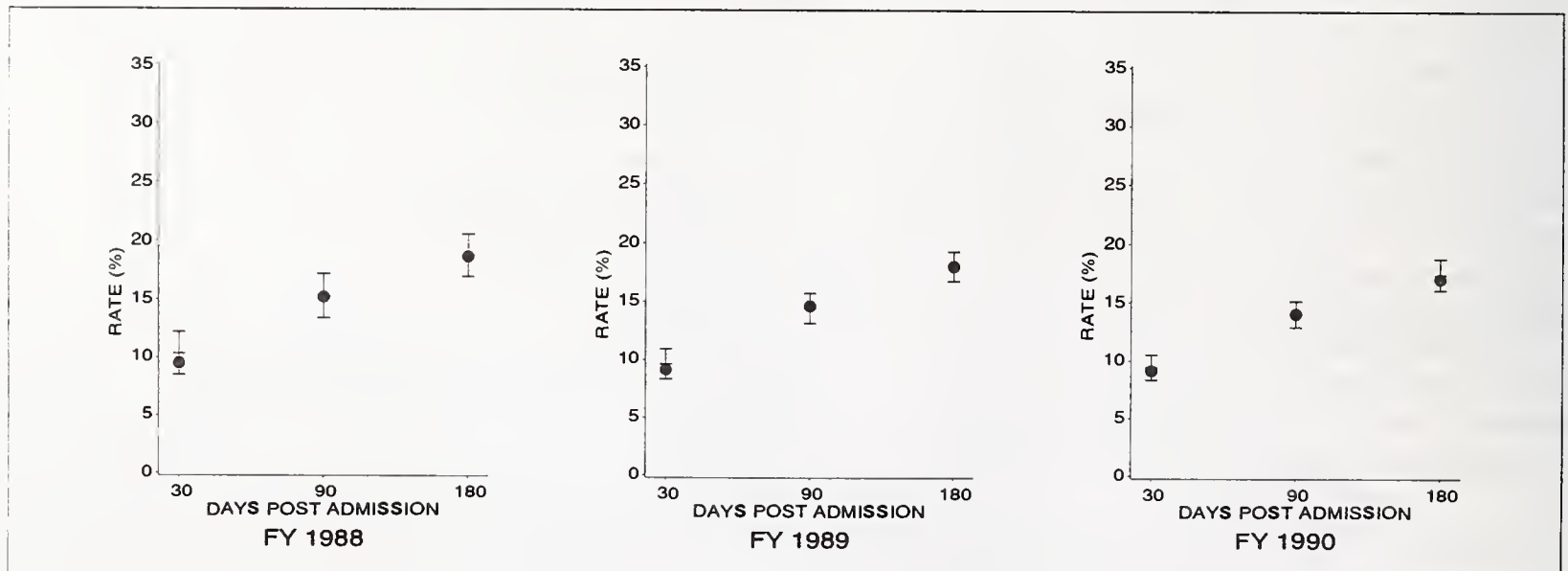
27 PARK ST  
HYANNIS, MA 02601  
Medicare Provider Number: 220012

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 4212               | 9.1                 | 9.4  | 0.5   | 14.0    | 14.0 | 0.6   | 17.0     | 17.4 | 0.7   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 171                | 20.5                | 23.9 | 4.7   | 25.7    | 27.2 | 4.3   | 27.5     | 30.0 | 4.6   |
| Congestive Heart Failure.....              | 246                | 13.0                | 14.7 | 3.4   | 20.3    | 23.0 | 3.6   | 26.8     | 29.3 | 3.7   |
| Pneumonia/Influenza.....                   | 146                | 21.2                | 17.2 | 5.1   | 30.8    | 23.2 | 6.4   | 32.2     | 27.2 | 6.8   |
| Chronic Obstructive Pulmonary Disease..... | 45                 | 4.4                 | 9.3  | ----- | 4.4     | 15.3 | ----- | 8.9      | 20.0 | ----- |
| Transient Cerebral Ischemia.....           | 44                 | 0.0                 | 1.6  | ----- | 4.5     | 3.5  | ----- | 4.5      | 5.8  | ----- |
| Stroke.....                                | 190                | 16.8                | 22.0 | 5.9   | 26.8    | 29.0 | 5.9   | 31.1     | 32.9 | 5.2   |
| Hip Fracture.....                          | 173                | 6.4                 | 6.7  | 2.7   | 10.4    | 11.8 | 3.4   | 13.3     | 15.4 | 3.8   |
| Sepsis.....                                | 20                 | 30.0                | 24.4 | ----- | 35.0    | 30.7 | ----- | 35.0     | 34.4 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 45                 | 0.0                 | 3.3  | ----- | 2.2     | 6.0  | ----- | 4.4      | 8.4  | ----- |
| Carotid Endarterectomy.....                | 2                  | 0.0                 | 1.7  | ----- | 0.0     | 3.4  | ----- | 0.0      | 5.0  | ----- |
| Hip Replacement/Reconstruction.....        | 91                 | 5.5                 | 4.6  | 2.5   | 7.7     | 8.8  | 3.2   | 11.0     | 11.9 | 3.8   |
| Open Reduction of Hip Fracture.....        | 93                 | 5.4                 | 6.3  | 2.7   | 10.8    | 11.4 | 3.4   | 12.9     | 15.1 | 4.1   |
| Prostatectomy.....                         | 216                | 0.5                 | 0.9  | 0.8   | 1.4     | 2.1  | 1.3   | 3.7      | 3.7  | 1.3   |
| Cholecystectomy.....                       | 76                 | 3.9                 | 2.6  | 2.8   | 5.3     | 4.6  | 3.2   | 5.3      | 6.0  | 3.8   |
| Hysterectomy.....                          | 33                 | 0.0                 | 0.4  | ----- | 0.0     | 1.0  | ----- | 0.0      | 1.7  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



**CAPE COD HOSPITAL**  
Medicare Provider Number: 220012

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

|                                                |            |                                     |        |
|------------------------------------------------|------------|-------------------------------------|--------|
| <b>DEMOGRAPHICS:</b>                           |            | <b>COMORBIDITIES:</b>               |        |
| Average age at admission.....                  | 76.7 years | Cancer.....                         | 7.1 %  |
| Proportion female.....                         | 54.4 %     | Chronic cardiovascular disease..... | 36.8 % |
| <b>ADMISSION SOURCES/TYPES:</b>                |            | Chronic liver disease.....          | 0.7 %  |
| Referred by personal or HMO physician.....     | 24.7 %     | Chronic renal disease.....          | 2.6 %  |
| Transferred from skilled nursing facility..... | 0.0 %      | Chronic pulmonary disease.....      | 12.6 % |
| Admitted for elective procedure.....           | 19.0 %     | Cerebrovascular degeneration.....   | 3.8 %  |
| Admitted for emergency.....                    | 72.8 %     | Diabetes mellitus.....              | 5.3 %  |

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

|                                              |        |                                         |           |
|----------------------------------------------|--------|-----------------------------------------|-----------|
| <b>ORIGIN OF MEDICARE PATIENT ADMISSION:</b> |        | <b>MEDICARE AVERAGE LENGTH OF STAY:</b> |           |
| County/City .....                            | 90.3%  | Hospital .....                          | 8.0 Days  |
| State .....                                  | 4.5%   | State .....                             | 10.1 Days |
| Outside State .....                          | 5.2%   | National .....                          | 8.6 Days  |
| Total .....                                  | 100.0% |                                         |           |

**HOSPITAL CHARACTERISTICS\***

|                                                                    |                     |                                                 |     |
|--------------------------------------------------------------------|---------------------|-------------------------------------------------|-----|
| <b>SOURCE: AHA Annual Survey of Hospitals** - Survey Year 1990</b> |                     |                                                 |     |
| <b>PROFILE:</b>                                                    |                     | <b>SPECIALTY SERVICES:</b>                      |     |
| Total Beds .....                                                   | 258                 | Burn Unit .....                                 | No  |
| Occupancy Rate .....                                               | 81.0 %              | Cardiac Intensive Care .....                    | No  |
| Ownership/Control.....                                             | Private, Non-Profit | Comprehensive Geriatric .....                   | Yes |
| Medicare Discharges .....                                          | 52.2 %              | Hospice Care .....                              | No  |
| Case Mix Index (CMI) .....                                         | 1.1940              | Medical/Surgical Intensive Care .....           | Yes |
| <b>STAFFING:</b>                                                   |                     | Organ/Tissue Transplant .....                   | No  |
| Total Number of Physicians.....                                    | 136                 | Other Intensive Care .....                      | No  |
| Percent of Physicians Board<br>Certified Specialists .....         | 78.7 %              | Trauma Center .....                             | Yes |
| Medical Residents/Interns .....                                    | 0                   | <b>OTHER SPECIALTY/HOSPITAL-BASED SERVICES:</b> |     |
| Registered Nurses.....                                             | 248                 | Alcohol/Drug .....                              | No  |
| Licensed Practical Nurses .....                                    | 31                  | Rehabilitation.....                             | No  |
|                                                                    |                     | Psychiatric .....                               | Yes |
|                                                                    |                     | Medicare Swing Beds .....                       | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates

# CARDINAL CUSHING GENERAL HOSPITAL

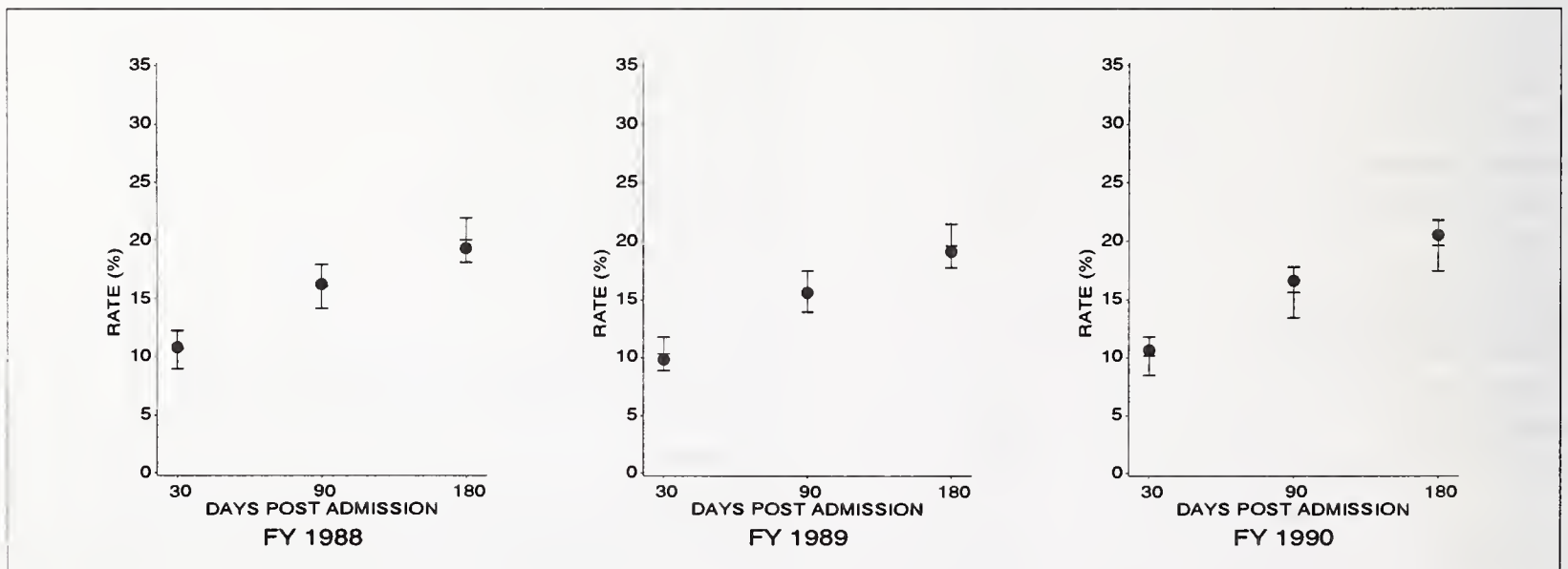
235 N PEARL ST  
BROCKTON, MA 02401  
Medicare Provider Number: 220156

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 2283               | 10.6                | 10.1 | 0.8  | 16.6    | 15.6 | 1.1  | 20.5     | 19.6 | 1.1  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 77                 | 32.5                | 29.7 | 5.7  | 36.4    | 33.2 | 5.8  | 39.0     | 36.3 | 6.1  |
| Congestive Heart Failure.....              | 179                | 21.2                | 16.2 | 4.4  | 34.6    | 25.9 | 5.2  | 42.5     | 32.6 | 5.5  |
| Pneumonia/Influenza.....                   | 116                | 15.5                | 19.8 | 4.6  | 21.6    | 27.2 | 6.2  | 26.7     | 31.6 | 6.2  |
| Chronic Obstructive Pulmonary Disease..... | 35                 | 11.4                | 9.3  | ---- | 11.4    | 16.2 | ---- | 20.0     | 21.1 | ---- |
| Transient Cerebral Ischemia.....           | 38                 | 0.0                 | 2.0  | ---- | 2.6     | 4.6  | ---- | 2.6      | 7.5  | ---- |
| Stroke.....                                | 94                 | 21.3                | 20.9 | 4.2  | 29.8    | 27.4 | 5.1  | 33.0     | 31.4 | 5.0  |
| Hip Fracture.....                          | 54                 | 5.6                 | 8.4  | 4.8  | 13.0    | 14.8 | 5.4  | 18.5     | 19.1 | 5.5  |
| Sepsis.....                                | 23                 | 34.8                | 27.7 | ---- | 52.2    | 37.2 | ---- | 52.2     | 42.8 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 17                 | 0.0                 | 2.2  | ---- | 5.9     | 4.7  | ---- | 5.9      | 7.4  | ---- |
| Carotid Endarterectomy.....                | 13                 | 0.0                 | 1.0  | ---- | 0.0     | 1.9  | ---- | 0.0      | 2.8  | ---- |
| Hip Replacement/Reconstruction.....        | 14                 | 0.0                 | 3.5  | ---- | 7.1     | 6.2  | ---- | 7.1      | 8.3  | ---- |
| Open Reduction of Hip Fracture.....        | 31                 | 6.5                 | 7.0  | ---- | 9.7     | 13.2 | ---- | 9.7      | 17.5 | ---- |
| Prostatectomy.....                         | 70                 | 0.0                 | 1.4  | 1.7  | 0.0     | 3.3  | 3.1  | 1.4      | 5.3  | 4.0  |
| Cholecystectomy.....                       | 26                 | 3.8                 | 2.1  | ---- | 3.8     | 3.9  | ---- | 7.7      | 5.1  | ---- |
| Hysterectomy.....                          | 5                  | 0.0                 | 2.4  | ---- | 0.0     | 5.3  | ---- | 0.0      | 8.1  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# CARDINAL CUSHING GENERAL HOSPITAL

Medicare Provider Number: 220156

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.5 years  
Proportion female..... 60.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 36.6 %  
Transferred from skilled nursing facility..... 1.1 %  
Admitted for elective procedure..... 11.3 %  
Admitted for emergency..... 61.1 %

### COMORBIDITIES:

Cancer..... 7.4 %  
Chronic cardiovascular disease..... 40.8 %  
Chronic liver disease..... 0.6 %  
Chronic renal disease..... 3.3 %  
Chronic pulmonary disease..... 17.6 %  
Cerebrovascular degeneration..... 7.1 %  
Diabetes mellitus..... 7.1 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 55.3%  
State ..... 42.6%  
Outside State ..... 2.1%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 11.5 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 275  
Occupancy Rate ..... 70.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 49.0 %  
Case Mix Index (CMI) ..... 1.1928

### STAFFING:

Total Number of Physicians..... 188  
Percent of Physicians Board  
Certified Specialists ..... 85.6 %  
Medical Residents/Interns ..... 5  
Registered Nurses..... 155  
Licensed Practical Nurses ..... 79

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

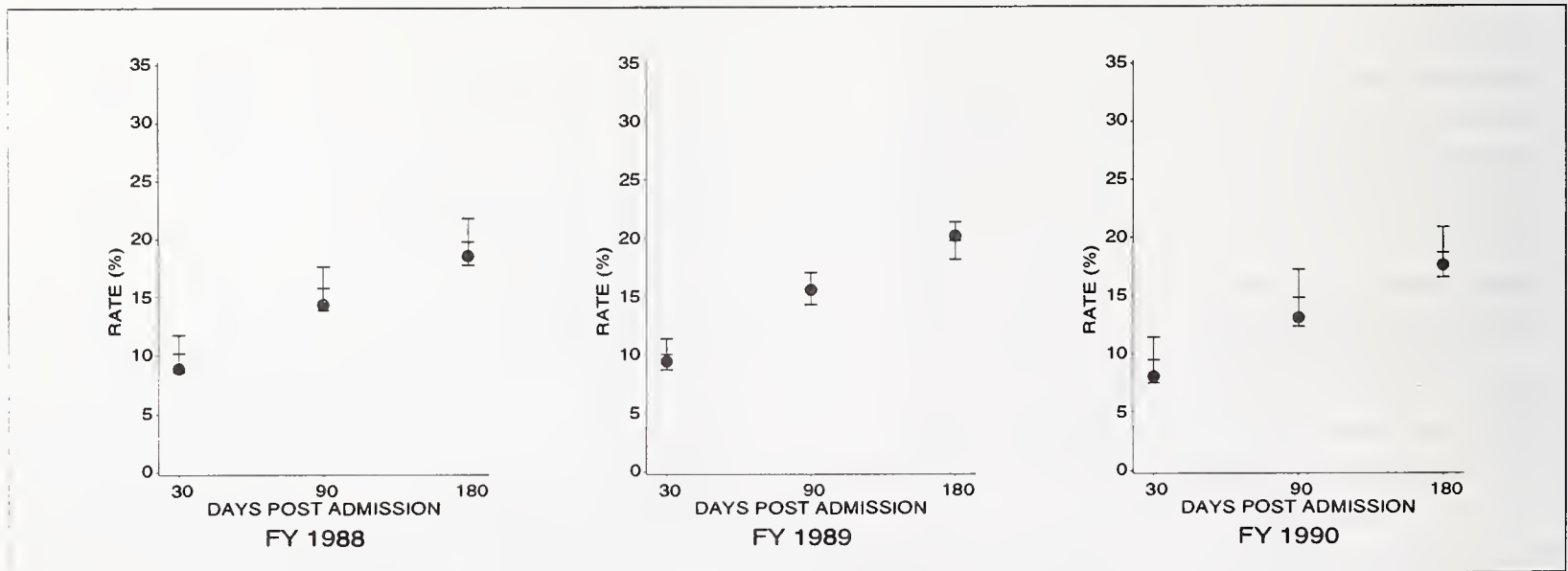
**CARNEY HOSPITAL**  
2100 DORCHESTER AVE  
BOSTON, MA 02124  
Medicare Provider Number: 220017

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 2922               | 8.1                 | 9.5  | 1.0  | 13.1    | 14.8 | 1.2  | 17.6     | 18.7 | 1.1  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 85                 | 20.0                | 26.2 | 7.7  | 23.5    | 30.6 | 7.4  | 32.9     | 34.0 | 7.0  |
| Congestive Heart Failure.....              | 124                | 13.7                | 15.8 | 3.9  | 18.5    | 25.2 | 6.0  | 28.2     | 32.1 | 5.2  |
| Pneumonia/Influenza.....                   | 151                | 15.9                | 16.4 | 3.0  | 22.5    | 22.8 | 5.8  | 27.8     | 27.1 | 4.8  |
| Chronic Obstructive Pulmonary Disease..... | 39                 | 2.6                 | 5.4  | ---- | 2.6     | 10.5 | ---- | 5.1      | 14.8 | ---- |
| Transient Cerebral Ischemia.....           | 34                 | 0.0                 | 1.6  | ---- | 0.0     | 3.8  | ---- | 0.0      | 6.3  | ---- |
| Stroke.....                                | 109                | 22.0                | 21.3 | 4.7  | 30.3    | 28.6 | 5.6  | 37.6     | 32.8 | 7.0  |
| Hip Fracture.....                          | 83                 | 8.4                 | 8.0  | 3.3  | 13.3    | 14.1 | 4.3  | 18.1     | 18.2 | 5.7  |
| Sepsis.....                                | 33                 | 33.3                | 26.9 | ---- | 39.4    | 36.0 | ---- | 42.4     | 41.1 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 12                 | 8.3                 | 4.1  | ---- | 8.3     | 7.7  | ---- | 25.0     | 10.9 | ---- |
| Carotid Endarterectomy.....                | 4                  | 0.0                 | 1.2  | ---- | 0.0     | 2.6  | ---- | 0.0      | 4.1  | ---- |
| Hip Replacement/Reconstruction.....        | 30                 | 0.0                 | 6.9  | ---- | 6.7     | 12.9 | ---- | 16.7     | 16.9 | ---- |
| Open Reduction of Hip Fracture.....        | 48                 | 10.4                | 6.5  | ---- | 16.7    | 11.5 | ---- | 16.7     | 15.0 | ---- |
| Prostatectomy.....                         | 73                 | 0.0                 | 1.2  | 1.8  | 1.4     | 2.9  | 2.9  | 4.1      | 4.9  | 3.8  |
| Cholecystectomy.....                       | 45                 | 2.2                 | 3.9  | ---- | 6.7     | 6.9  | ---- | 8.9      | 8.8  | ---- |
| Hysterectomy.....                          | 5                  | 0.0                 | 4.7  | ---- | 0.0     | 10.8 | ---- | 20.0     | 16.0 | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



**CARNEY HOSPITAL**  
Medicare Provider Number: 220017

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 76.0 years  
Proportion female..... 62.9 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 27.7 %  
Transferred from skilled nursing facility..... 1.5 %  
Admitted for elective procedure..... 13.5 %  
Admitted for emergency..... 11.7 %

**COMORBIDITIES:**

Cancer..... 6.2 %  
Chronic cardiovascular disease..... 30.7 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 6.6 %  
Chronic pulmonary disease..... 17.2 %  
Cerebrovascular degeneration..... 7.3 %  
Diabetes mellitus..... 7.2 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 59.9%  
State ..... 38.8%  
Outside State ..... 1.3%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 10.5 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 296  
Occupancy Rate ..... 77.0 %  
Ownership/Control..... Church  
Medicare Discharges ..... 41.5 %  
Case Mix Index (CMI) ..... 1.2503

**STAFFING:**

Total Number of Physicians..... 292  
Percent of Physicians Board  
Certified Specialists ..... 68.2 %  
Medical Residents/Interns ..... 55  
Registered Nurses..... 351  
Licensed Practical Nurses ..... 7

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... Yes  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# CHARLTON MEMORIAL HOSPITAL

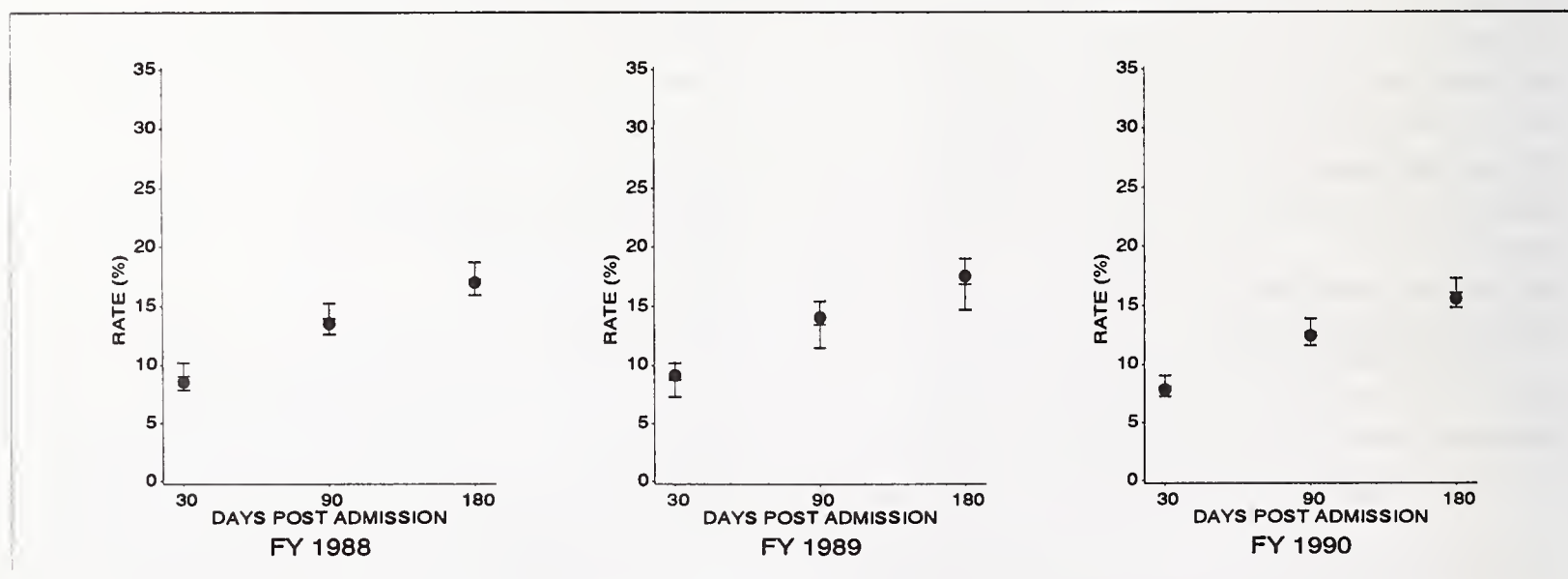
363 HIGHLAND AVENUE  
FALL RIVER, MA 02720  
Medicare Provider Number: 220055

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 3685            | 7.8                 | 8.1  | 0.5   | 12.4    | 12.7 | 0.6   | 15.5     | 16.0 | 0.6   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 181             | 18.2                | 18.1 | 5.1   | 26.5    | 22.3 | 5.4   | 28.2     | 25.6 | 4.6   |
| Congestive Heart Failure.....              | 202             | 14.4                | 14.8 | 4.8   | 21.8    | 23.6 | 4.5   | 27.7     | 29.9 | 4.3   |
| Pneumonia/Influenza.....                   | 166             | 12.7                | 15.1 | 3.1   | 22.9    | 21.0 | 3.4   | 24.1     | 25.0 | 3.4   |
| Chronic Obstructive Pulmonary Disease..... | 69              | 10.1                | 5.9  | 5.5   | 15.9    | 11.2 | 8.2   | 26.1     | 15.9 | 10.2  |
| Transient Cerebral Ischemia.....           | 82              | 3.7                 | 1.9  | 2.5   | 7.3     | 4.3  | 3.5   | 7.3      | 7.0  | 3.1   |
| Stroke.....                                | 147             | 19.7                | 18.7 | 3.6   | 27.2    | 25.6 | 3.9   | 29.9     | 29.5 | 3.8   |
| Hip Fracture.....                          | 89              | 3.4                 | 5.8  | 3.5   | 5.6     | 10.3 | 5.0   | 7.9      | 13.6 | 6.0   |
| Sepsis.....                                | 31              | 6.5                 | 17.8 | ----- | 16.1    | 25.6 | ----- | 25.8     | 29.9 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 38              | 2.6                 | 2.4  | ----- | 5.3     | 4.9  | ----- | 5.3      | 7.3  | ----- |
| Carotid Endarterectomy.....                | 13              | 0.0                 | 1.3  | ----- | 0.0     | 2.3  | ----- | 0.0      | 3.5  | ----- |
| Hip Replacement/Reconstruction.....        | 57              | 0.0                 | 2.0  | 2.3   | 1.8     | 3.8  | 3.0   | 3.5      | 5.3  | 3.3   |
| Open Reduction of Hip Fracture.....        | 57              | 1.8                 | 5.5  | 3.8   | 3.5     | 10.0 | 5.7   | 5.3      | 13.5 | 6.9   |
| Prostatectomy.....                         | 148             | 0.0                 | 0.8  | ----- | 0.0     | 1.7  | ----- | 0.0      | 3.0  | ----- |
| Cholecystectomy.....                       | 82              | 2.4                 | 2.5  | 2.2   | 2.4     | 4.6  | 3.4   | 3.7      | 6.0  | 4.1   |
| Hysterectomy.....                          | 48              | 0.0                 | 0.3  | ----- | 0.0     | 0.7  | ----- | 0.0      | 1.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# CHARLTON MEMORIAL HOSPITAL

Medicare Provider Number: 220055

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.9 years  
Proportion female..... 56.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 28.4 %  
Transferred from skilled nursing facility..... 0.5 %  
Admitted for elective procedure..... 15.0 %  
Admitted for emergency..... 0.8 %

### COMORBIDITIES:

Cancer..... 4.7 %  
Chronic cardiovascular disease..... 41.3 %  
Chronic liver disease..... 1.4 %  
Chronic renal disease..... 2.8 %  
Chronic pulmonary disease..... 19.6 %  
Cerebrovascular degeneration..... 5.2 %  
Diabetes mellitus..... 16.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 89.1%  
State ..... 1.2%  
Outside State ..... 9.7%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 12.4 Days  
State ..... 10.1 Days  
National ... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 324  
Occupancy Rate ..... 88.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 46.1 %  
Case Mix Index (CMI) ..... 1.1740

### STAFFING:

Total Number of Physicians..... 166  
Percent of Physicians Board  
Certified Specialists ..... 88.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 229  
Licensed Practical Nurses ..... 61

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# DANA-FARBER CANCER INSTITUTE

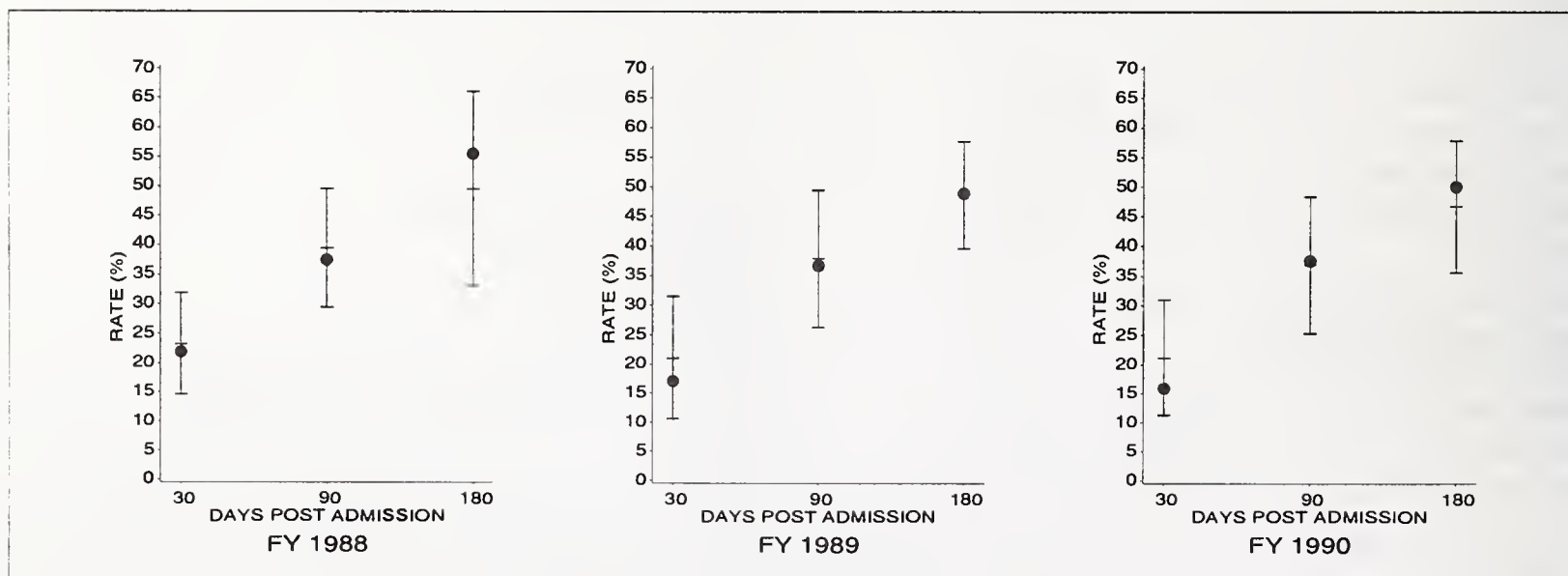
44 BINNEY ST  
BOSTON, MA 02115  
Medicare Provider Number: 220162

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |     |         |      |     |          |      |     |
|--------------------------------------------|--------------------|---------------------|------|-----|---------|------|-----|----------|------|-----|
|                                            |                    | 30 DAYS             |      |     | 90 DAYS |      |     | 180 DAYS |      |     |
|                                            |                    | OBS                 | PRED | SD* | OBS     | PRED | SD* | OBS      | PRED | SD* |
| ALL CAUSES.....                            | 88                 | 15.9                | 21.1 | 4.9 | 37.5    | 36.8 | 5.8 | 50.0     | 46.7 | 5.6 |
| CONDITIONS:                                |                    |                     |      |     |         |      |     |          |      |     |
| Acute Myocardial Infarction.....           | 0                  |                     |      |     |         |      |     |          |      |     |
| Congestive Heart Failure.....              | 0                  |                     |      |     |         |      |     |          |      |     |
| Pneumonia/Influenza.....                   | 0                  |                     |      |     |         |      |     |          |      |     |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |     |         |      |     |          |      |     |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |     |         |      |     |          |      |     |
| Stroke.....                                | 0                  |                     |      |     |         |      |     |          |      |     |
| Hip Fracture.....                          | 0                  |                     |      |     |         |      |     |          |      |     |
| Sepsis.....                                | 0                  |                     |      |     |         |      |     |          |      |     |
| PROCEDURES:                                |                    |                     |      |     |         |      |     |          |      |     |
| Angioplasty.....                           | 0                  |                     |      |     |         |      |     |          |      |     |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |     |         |      |     |          |      |     |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |     |         |      |     |          |      |     |
| Carotid Endarterectomy.....                | 0                  |                     |      |     |         |      |     |          |      |     |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |     |         |      |     |          |      |     |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |     |         |      |     |          |      |     |
| Prostatectomy.....                         | 0                  |                     |      |     |         |      |     |          |      |     |
| Cholecystectomy.....                       | 0                  |                     |      |     |         |      |     |          |      |     |
| Hysterectomy.....                          | 0                  |                     |      |     |         |      |     |          |      |     |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm$ 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# DANA-FARBER CANCER INSTITUTE

Medicare Provider Number: 220162

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 68.9 years  
Proportion female..... 53.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 83.1 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 34.8 %  
Admitted for emergency..... 64.0 %

### COMORBIDITIES:

Cancer..... 59.6 %  
Chronic cardiovascular disease..... 9.0 %  
Chronic liver disease..... 0.0 %  
Chronic renal disease..... 0.0 %  
Chronic pulmonary disease..... 2.2 %  
Cerebrovascular degeneration..... 1.1 %  
Diabetes mellitus..... 2.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 14.3%  
State ..... 65.5%  
Outside State ..... 20.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 6.9 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 57  
Occupancy Rate ..... 82.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 14.9 %  
Case Mix Index (CMI) ..... 1.2286

### STAFFING:

Total Number of Physicians..... 144  
Percent of Physicians Board  
Certified Specialists..... 88.9 %  
Medical Residents/Interns ..... (Not Available)  
Registered Nurses..... (Not Available)  
Licensed Practical Nurses..... (Not Available)

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

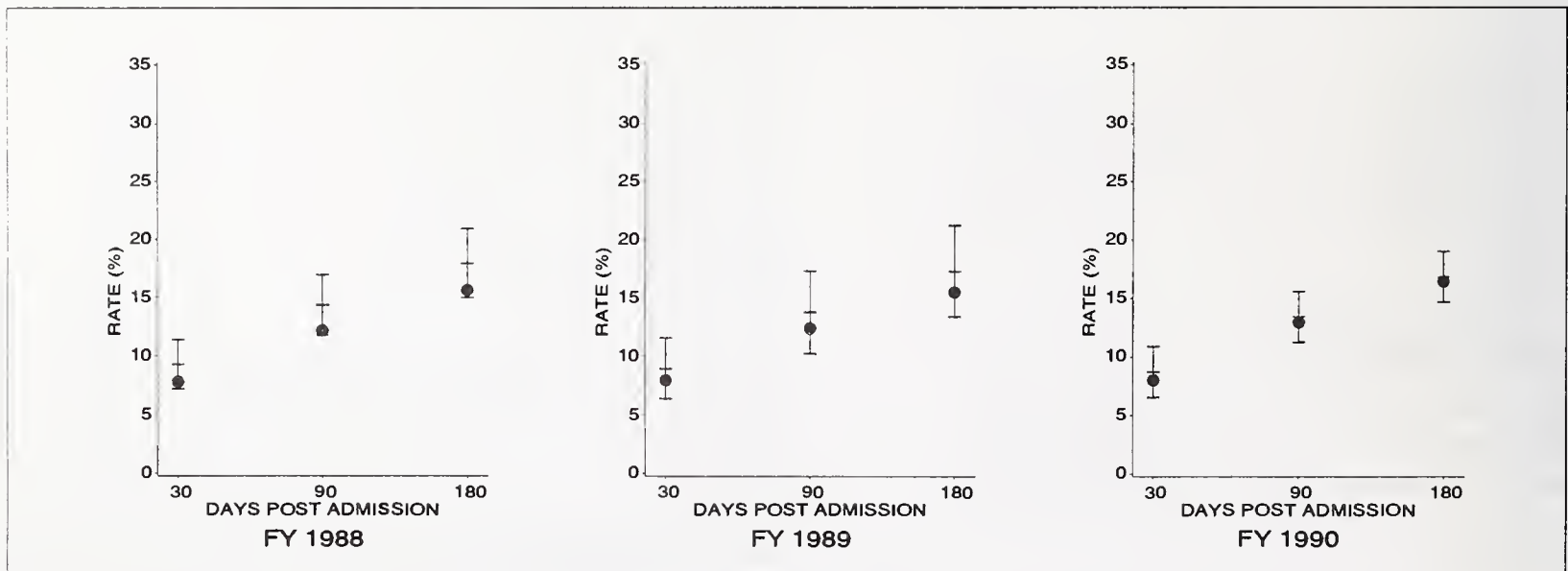
**EMERSON HOSPITAL**  
 OLD RD TO 9 ACRE CORNER  
 CONCORD, MA 01742  
 Medicare Provider Number: 220084

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1520               | 8.0                 | 8.7  | 1.1   | 12.9    | 13.4 | 1.1   | 16.4     | 16.8 | 1.1   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 47                 | 29.8                | 27.8 | ----- | 34.0    | 31.1 | ----- | 36.2     | 33.9 | ----- |
| Congestive Heart Failure.....              | 80                 | 16.2                | 14.8 | 4.4   | 23.7    | 23.3 | 4.8   | 30.0     | 29.4 | 5.1   |
| Pneumonia/Influenza.....                   | 68                 | 11.8                | 14.5 | 5.4   | 20.6    | 19.9 | 5.0   | 29.4     | 23.4 | 6.8   |
| Chronic Obstructive Pulmonary Disease..... | 23                 | 13.0                | 6.6  | ----- | 26.1    | 11.8 | ----- | 30.4     | 16.1 | ----- |
| Transient Cerebral Ischemia.....           | 36                 | 0.0                 | 1.6  | ----- | 0.0     | 3.5  | ----- | 5.6      | 5.6  | ----- |
| Stroke.....                                | 55                 | 16.4                | 24.1 | 6.4   | 29.1    | 30.4 | 6.3   | 32.7     | 34.2 | 6.4   |
| Hip Fracture.....                          | 72                 | 11.1                | 7.0  | 4.5   | 15.3    | 12.3 | 5.5   | 18.1     | 15.8 | 6.7   |
| Sepsis.....                                | 20                 | 20.0                | 31.5 | ----- | 30.0    | 37.8 | ----- | 30.0     | 42.2 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 19                 | 0.0                 | 2.8  | ----- | 10.5    | 5.8  | ----- | 15.8     | 9.0  | ----- |
| Carotid Endarterectomy.....                | 2                  | 0.0                 | 2.0  | ----- | 0.0     | 3.8  | ----- | 0.0      | 5.4  | ----- |
| Hip Replacement/Reconstruction.....        | 44                 | 6.8                 | 3.8  | ----- | 9.1     | 7.1  | ----- | 11.4     | 9.5  | ----- |
| Open Reduction of Hip Fracture.....        | 45                 | 6.7                 | 5.9  | ----- | 8.9     | 10.6 | ----- | 13.3     | 14.1 | ----- |
| Prostatectomy.....                         | 29                 | 0.0                 | 0.9  | ----- | 0.0     | 2.1  | ----- | 0.0      | 3.8  | ----- |
| Cholecystectomy.....                       | 28                 | 3.6                 | 2.2  | ----- | 3.6     | 4.1  | ----- | 7.1      | 5.7  | ----- |
| Hysterectomy.....                          | 12                 | 0.0                 | 0.2  | ----- | 0.0     | 0.4  | ----- | 0.0      | 0.6  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD)  
 FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



# EMERSON HOSPITAL

Medicare Provider Number: 220084

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.7 years  
Proportion female..... 59.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 32.3 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 16.8 %  
Admitted for emergency..... 63.8 %

### COMORBIDITIES:

Cancer..... 7.8 %  
Chronic cardiovascular disease..... 33.7 %  
Chronic liver disease..... 1.0 %  
Chronic renal disease..... 1.2 %  
Chronic pulmonary disease..... 13.6 %  
Cerebrovascular degeneration..... 4.6 %  
Diabetes mellitus..... 5.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 87.4%  
State ..... 6.7%  
Outside State ..... 5.9%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.9 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 182  
Occupancy Rate ..... 75.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 25.7 %  
Case Mix Index (CMI) ..... 1.2009

### STAFFING:

Total Number of Physicians..... 170  
Percent of Physicians Board  
Certified Specialists ..... 78.2 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 211  
Licensed Practical Nurses ..... 23

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



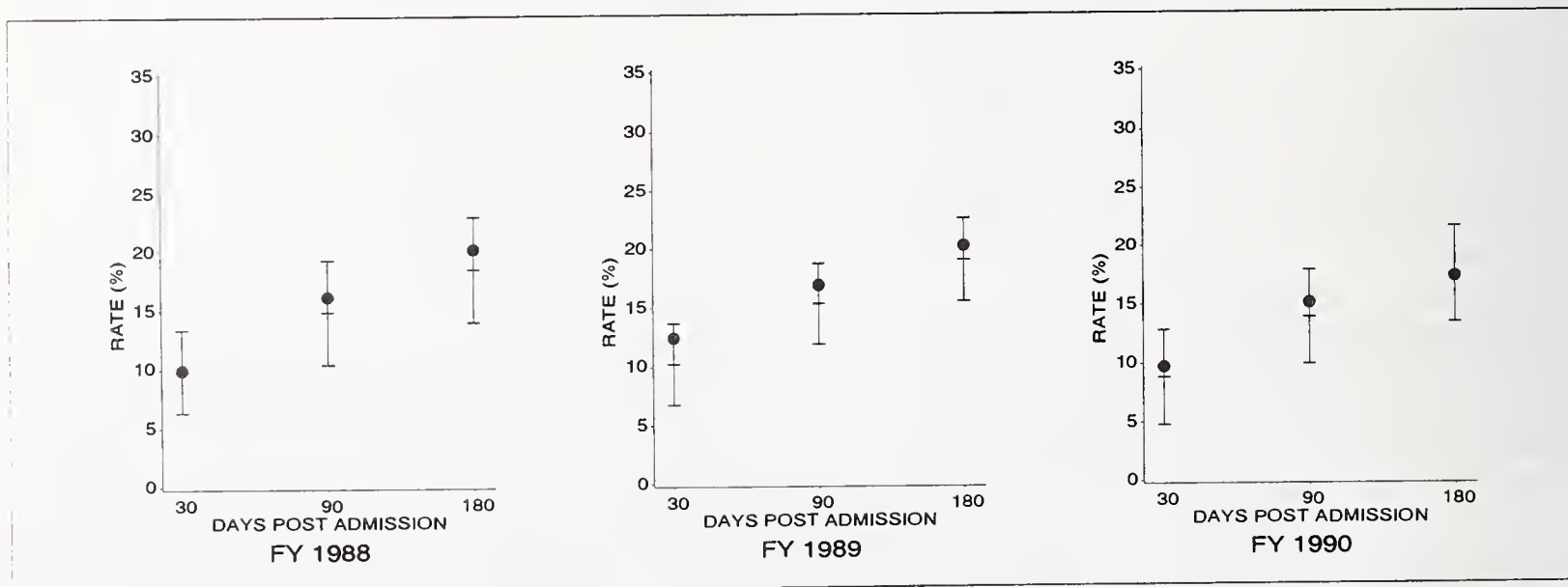
**FAIRVIEW HOSPITAL**  
29 LEWIS AVE  
GREAT BARRINGTON, MA 01230  
Medicare Provider Number: 220038

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 556             | 9.7                 | 8.8  | 2.0   | 15.1    | 13.9 | 2.0   | 17.3     | 17.5 | 2.1   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 15              | 6.7                 | 17.6 | ----- | 6.7     | 20.9 | ----- | 13.3     | 23.4 | ----- |
| Congestive Heart Failure.....              | 41              | 17.1                | 13.9 | ----- | 22.0    | 21.9 | ----- | 26.8     | 27.9 | ----- |
| Pneumonia/Influenza.....                   | 26              | 7.7                 | 14.2 | ----- | 19.2    | 20.1 | ----- | 23.1     | 23.6 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 6               | 0.0                 | 7.8  | ----- | 0.0     | 13.3 | ----- | 0.0      | 18.0 | ----- |
| Transient Cerebral Ischemia.....           | 10              | 0.0                 | 1.6  | ----- | 0.0     | 3.7  | ----- | 20.0     | 6.2  | ----- |
| Stroke.....                                | 16              | 12.5                | 21.0 | ----- | 31.3    | 27.0 | ----- | 31.3     | 31.1 | ----- |
| Hip Fracture.....                          | 29              | 10.3                | 5.0  | ----- | 17.2    | 9.1  | ----- | 17.2     | 12.2 | ----- |
| Sepsis.....                                | 6               | 33.3                | 37.8 | ----- | 33.3    | 49.1 | ----- | 50.0     | 55.8 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 13              | 7.7                 | 3.0  | ----- | 15.4    | 5.7  | ----- | 15.4     | 8.0  | ----- |
| Open Reduction of Hip Fracture.....        | 16              | 12.5                | 4.6  | ----- | 18.8    | 8.6  | ----- | 18.8     | 11.6 | ----- |
| Prostatectomy.....                         | 9               | 0.0                 | 0.9  | ----- | 0.0     | 2.3  | ----- | 0.0      | 4.3  | ----- |
| Cholecystectomy.....                       | 10              | 0.0                 | 1.2  | ----- | 0.0     | 2.0  | ----- | 0.0      | 2.6  | ----- |
| Hysterectomy.....                          | 4               | 0.0                 | 0.9  | ----- | 0.0     | 1.6  | ----- | 0.0      | 2.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$  SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



# FAIRVIEW HOSPITAL

Medicare Provider Number: 220038

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.7 years  
Proportion female..... 63.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 81.3 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 19.2 %  
Admitted for emergency..... 45.7 %

### COMORBIDITIES:

Cancer..... 7.7 %  
Chronic cardiovascular disease..... 32.2 %  
Chronic liver disease..... 1.6 %  
Chronic renal disease..... 2.2 %  
Chronic pulmonary disease..... 11.5 %  
Cerebrovascular degeneration..... 6.3 %  
Diabetes mellitus..... 5.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 68.4%  
State ..... 0.6%  
Outside State ..... 31.0%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.6 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 43  
Occupancy Rate ..... 65.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 50.0 %  
Case Mix Index (CMI) ..... 1.2066

### STAFFING:

Total Number of Physicians..... 30  
Percent of Physicians Board  
Certified Specialists..... 80.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 41  
Licensed Practical Nurses ..... 17

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# FALMOUTH HOSPITAL

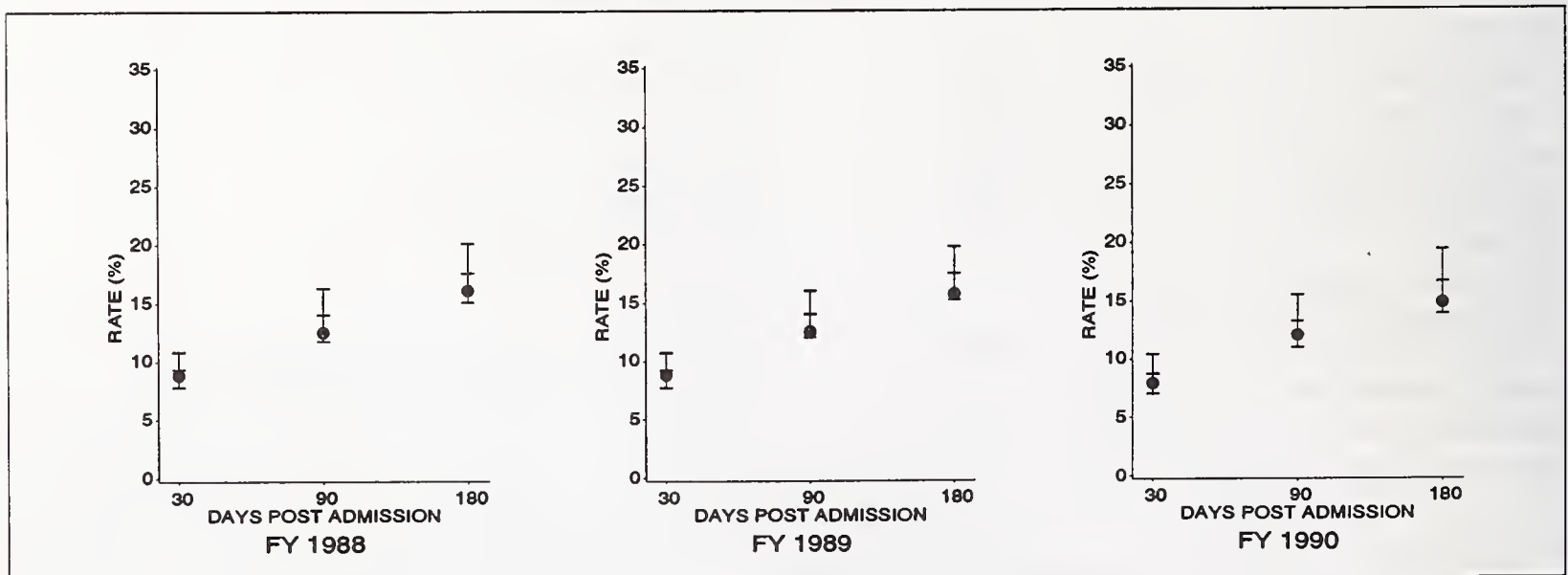
67&100 TER HEUN DR  
FALMOUTH, MA 02540  
Medicare Provider Number: 220135

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1678            | 7.9                 | 8.7  | 0.9  | 12.0    | 13.2 | 1.1  | 14.8     | 16.6 | 1.4  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 64              | 28.1                | 25.2 | 6.4  | 29.7    | 28.3 | 7.0  | 31.3     | 30.9 | 7.5  |
| Congestive Heart Failure.....              | 101             | 14.9                | 14.7 | 3.8  | 19.8    | 23.5 | 5.2  | 26.7     | 29.8 | 5.7  |
| Pneumonia/Influenza.....                   | 107             | 10.3                | 15.2 | 5.0  | 15.0    | 21.4 | 6.3  | 17.8     | 25.7 | 7.0  |
| Chronic Obstructive Pulmonary Disease..... | 28              | 10.7                | 7.9  | ---- | 14.3    | 13.6 | ---- | 17.9     | 17.9 | ---- |
| Transient Cerebral Ischemia.....           | 20              | 0.0                 | 1.2  | ---- | 0.0     | 3.1  | ---- | 10.0     | 5.7  | ---- |
| Stroke.....                                | 66              | 16.7                | 17.5 | 6.7  | 27.3    | 24.3 | 5.6  | 30.3     | 28.3 | 5.8  |
| Hip Fracture.....                          | 52              | 5.8                 | 4.9  | 3.1  | 5.8     | 8.7  | 4.3  | 7.7      | 11.7 | 5.7  |
| Sepsis.....                                | 25              | 16.0                | 22.7 | ---- | 24.0    | 29.1 | ---- | 28.0     | 33.6 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 9               | 0.0                 | 3.4  | ---- | 0.0     | 5.7  | ---- | 0.0      | 8.1  | ---- |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 40              | 2.5                 | 3.5  | ---- | 2.5     | 6.5  | ---- | 5.0      | 8.9  | ---- |
| Open Reduction of Hip Fracture.....        | 28              | 3.6                 | 4.3  | ---- | 3.6     | 7.9  | ---- | 3.6      | 10.7 | ---- |
| Prostatectomy.....                         | 94              | 0.0                 | 0.7  | 1.0  | 0.0     | 1.7  | 1.7  | 1.1      | 3.0  | 2.3  |
| Cholecystectomy.....                       | 21              | 0.0                 | 3.3  | ---- | 4.8     | 6.0  | ---- | 4.8      | 7.8  | ---- |
| Hysterectomy.....                          | 6               | 0.0                 | 0.4  | ---- | 0.0     | 0.9  | ---- | 0.0      | 1.5  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# FALMOUTH HOSPITAL

Medicare Provider Number: 220135

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.1 years  
Proportion female..... 54.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 28.1 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 3.8 %  
Admitted for emergency..... 10.0 %

### COMORBIDITIES:

Cancer..... 6.7 %  
Chronic cardiovascular disease..... 25.9 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 1.3 %  
Chronic pulmonary disease..... 10.6 %  
Cerebrovascular degeneration..... 4.5 %  
Diabetes mellitus..... 5.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 86.4%  
State ..... 8.6%  
Outside State ..... 5.0%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.5 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 127  
Occupancy Rate ..... 70.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 46.0 %  
Case Mix Index (CMI) ..... 1.1006

### STAFFING:

Total Number of Physicians..... 72  
Percent of Physicians Board  
Certified Specialists..... 80.6 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 98  
Licensed Practical Nurses..... 5

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# FAULKNER HOSPITAL

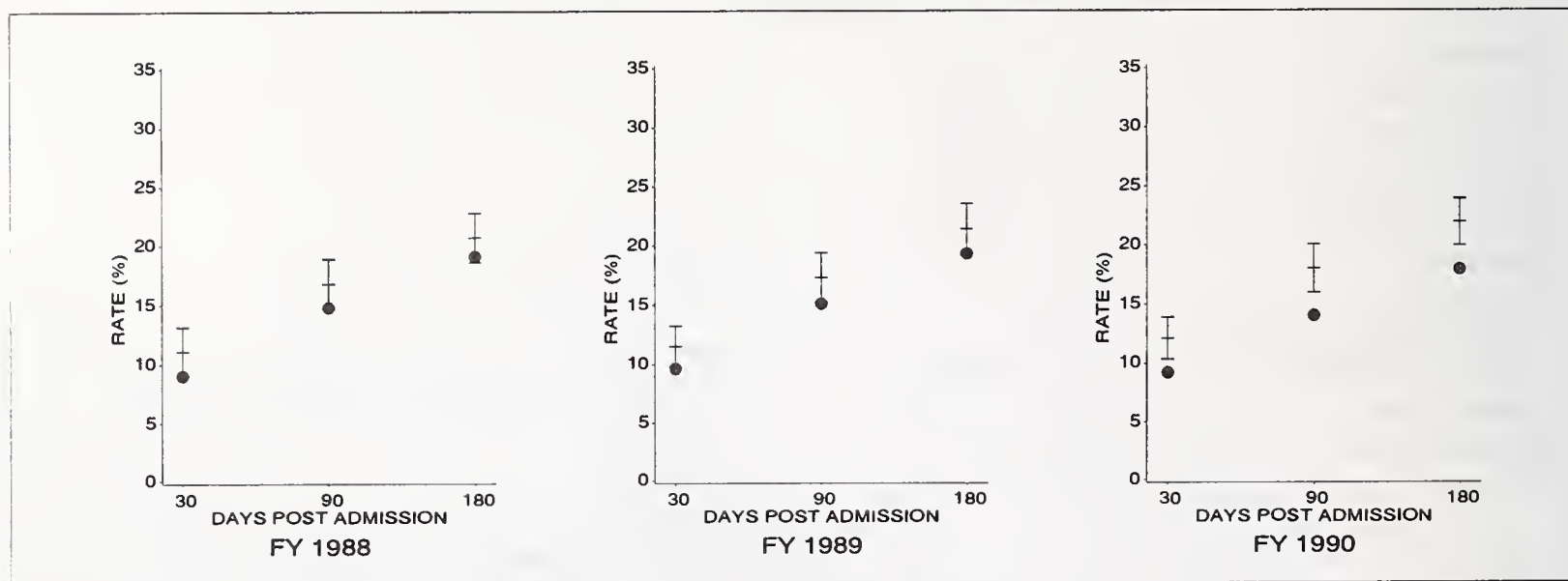
1153 CENTRE ST  
BOSTON, MA 02130  
Medicare Provider Number: 220119

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 2107            | 9.2                 | 12.1 | 0.9  | 14.0    | 18.0 | 1.0  | 17.9     | 21.9 | 1.0  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 87              | 32.2                | 28.7 | 5.7  | 33.3    | 32.7 | 5.4  | 37.9     | 35.8 | 5.5  |
| Congestive Heart Failure.....              | 99              | 6.1                 | 16.5 | 5.5  | 11.1    | 25.9 | 7.5  | 23.2     | 32.5 | 6.0  |
| Pneumonia/Influenza.....                   | 75              | 6.7                 | 17.1 | 5.2  | 8.0     | 23.3 | 6.7  | 12.0     | 27.1 | 6.8  |
| Chronic Obstructive Pulmonary Disease..... | 40              | 10.0                | 10.1 | ---- | 15.0    | 17.7 | ---- | 22.5     | 22.9 | ---- |
| Transient Cerebral Ischemia.....           | 13              | 0.0                 | 3.8  | ---- | 7.7     | 8.5  | ---- | 7.7      | 13.5 | ---- |
| Stroke.....                                | 93              | 19.4                | 23.0 | 5.4  | 29.0    | 30.6 | 5.1  | 34.4     | 34.9 | 5.9  |
| Hip Fracture.....                          | 74              | 5.4                 | 7.6  | 3.8  | 8.1     | 13.4 | 6.7  | 9.5      | 17.1 | 8.6  |
| Sepsis.....                                | 28              | 14.3                | 23.4 | ---- | 17.9    | 32.0 | ---- | 21.4     | 36.7 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 20              | 10.0                | 4.9  | ---- | 15.0    | 9.0  | ---- | 20.0     | 12.8 | ---- |
| Carotid Endarterectomy.....                | 2               | 0.0                 | 0.8  | ---- | 0.0     | 1.4  | ---- | 0.0      | 2.0  | ---- |
| Hip Replacement/Reconstruction.....        | 38              | 5.3                 | 6.2  | ---- | 7.9     | 11.5 | ---- | 7.9      | 15.1 | ---- |
| Open Reduction of Hip Fracture.....        | 42              | 2.4                 | 6.2  | ---- | 2.4     | 11.2 | ---- | 4.8      | 14.6 | ---- |
| Prostatectomy.....                         | 66              | 3.0                 | 2.0  | 1.9  | 7.6     | 4.8  | 3.5  | 9.1      | 8.0  | 4.0  |
| Cholecystectomy.....                       | 34              | 2.9                 | 3.7  | ---- | 5.9     | 6.9  | ---- | 5.9      | 9.1  | ---- |
| Hysterectomy.....                          | 14              | 0.0                 | 0.4  | ---- | 0.0     | 1.0  | ---- | 0.0      | 1.9  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# FAULKNER HOSPITAL

Medicare Provider Number: 220119

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.6 years  
 Proportion female..... 63.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 21.8 %  
 Transferred from skilled nursing facility..... 0.0 %  
 Admitted for elective procedure..... 13.1 %  
 Admitted for emergency..... 74.8 %

### COMORBIDITIES:

Cancer..... 8.7 %  
 Chronic cardiovascular disease..... 43.3 %  
 Chronic liver disease..... 1.3 %  
 Chronic renal disease..... 4.5 %  
 Chronic pulmonary disease..... 13.9 %  
 Cerebrovascular degeneration..... 6.5 %  
 Diabetes mellitus..... 8.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 69.3%  
 State..... 28.4%  
 Outside State..... 2.3%  
 Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 9.7 Days  
 State..... 10.1 Days  
 National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 245  
 Occupancy Rate..... 63.0 %  
 Ownership/Control..... Private, Non-Profit  
 Medicare Discharges..... 45.4 %  
 Case Mix Index (CMI)..... 1.3003

### STAFFING:

Total Number of Physicians..... 139  
 Percent of Physicians Board  
 Certified Specialists..... 96.4 %  
 Medical Residents/Interns..... 38  
 Registered Nurses..... 203  
 Licensed Practical Nurses..... 22

\*\* Except for CMI

### SPECIALTY SERVICES:

Burn Unit..... No  
 Cardiac Intensive Care..... Yes  
 Comprehensive Geriatric..... No  
 Hospice Care..... No  
 Medical/Surgical Intensive Care..... Yes  
 Organ/Tissue Transplant..... No  
 Other Intensive Care..... No  
 Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
 Rehabilitation..... No  
 Psychiatric..... Yes  
 Medicare Swing Beds..... No

\* Not used in calculating mortality rates



# FRAMINGHAM UNION HOSPITAL

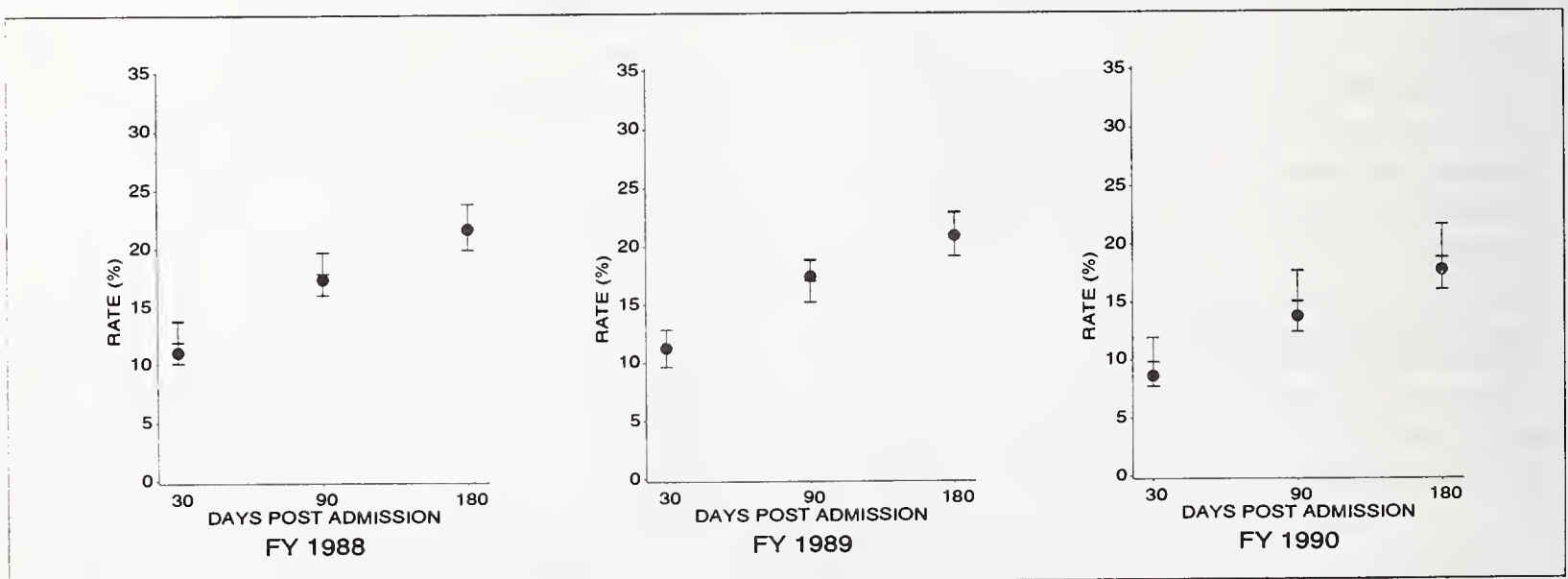
115 LINCOLN ST  
FRAMINGHAM, MA 01701  
Medicare Provider Number: 220089

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2061            | 8.6                 | 9.8  | 1.0   | 13.7    | 15.0 | 1.3   | 17.7     | 18.8 | 1.4   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 67              | 23.9                | 26.3 | 6.5   | 26.9    | 30.0 | 6.8   | 31.3     | 32.8 | 6.5   |
| Congestive Heart Failure.....              | 81              | 21.0                | 15.8 | 6.3   | 24.7    | 24.6 | 5.1   | 33.3     | 31.0 | 5.5   |
| Pneumonia/Influenza.....                   | 76              | 10.5                | 15.2 | 5.0   | 13.2    | 21.0 | 6.4   | 21.1     | 25.2 | 5.8   |
| Chronic Obstructive Pulmonary Disease..... | 24              | 8.3                 | 10.4 | ----- | 20.8    | 17.7 | ----- | 29.2     | 23.1 | ----- |
| Transient Cerebral Ischemia.....           | 46              | 0.0                 | 2.2  | ----- | 0.0     | 4.6  | ----- | 4.3      | 7.1  | ----- |
| Stroke.....                                | 62              | 19.4                | 23.8 | 7.9   | 32.3    | 30.8 | 8.6   | 33.9     | 34.7 | 7.7   |
| Hip Fracture.....                          | 76              | 6.6                 | 7.6  | 3.2   | 11.8    | 14.3 | 4.7   | 14.5     | 18.9 | 6.5   |
| Sepsis.....                                | 26              | 15.4                | 21.8 | ----- | 26.9    | 29.4 | ----- | 30.8     | 34.0 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 17              | 0.0                 | 3.3  | ----- | 5.9     | 6.3  | ----- | 5.9      | 9.2  | ----- |
| Carotid Endarterectomy.....                | 5               | 20.0                | 1.3  | ----- | 20.0    | 2.4  | ----- | 20.0     | 3.7  | ----- |
| Hip Replacement/Reconstruction.....        | 48              | 4.2                 | 5.4  | ----- | 8.3     | 10.4 | ----- | 8.3      | 14.0 | ----- |
| Open Reduction of Hip Fracture.....        | 37              | 2.7                 | 6.3  | ----- | 8.1     | 12.4 | ----- | 13.5     | 16.9 | ----- |
| Prostatectomy.....                         | 56              | 1.8                 | 0.9  | 1.9   | 1.8     | 2.0  | 2.3   | 1.8      | 3.3  | 3.0   |
| Cholecystectomy.....                       | 26              | 0.0                 | 3.3  | ----- | 7.7     | 5.9  | ----- | 7.7      | 7.8  | ----- |
| Hysterectomy.....                          | 11              | 0.0                 | 1.3  | ----- | 0.0     | 2.7  | ----- | 9.1      | 4.0  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# FRAMINGHAM UNION HOSPITAL

Medicare Provider Number: 220089

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.0 years  
Proportion female..... 58.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 21.5 %  
Transferred from skilled nursing facility..... 5.6 %  
Admitted for elective procedure..... 19.7 %  
Admitted for emergency..... 74.6 %

### COMORBIDITIES:

Cancer..... 8.9 %  
Chronic cardiovascular disease..... 40.1 %  
Chronic liver disease..... 0.9 %  
Chronic renal disease..... 2.4 %  
Chronic pulmonary disease..... 15.0 %  
Cerebrovascular degeneration..... 6.2 %  
Diabetes mellitus..... 6.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 77.9%  
State ..... 18.5%  
Outside State ..... 3.6%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.7 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 241  
Occupancy Rate ..... 61.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 28.3 %  
Case Mix Index (CMI) ..... 1.2371

### STAFFING:

Total Number of Physicians..... 143  
Percent of Physicians Board  
Certified Specialists ..... 94.4 %  
Medical Residents/Interns ..... 40  
Registered Nurses..... 252  
Licensed Practical Nurses ..... 14

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# FRANKLIN MEDICAL CENTER

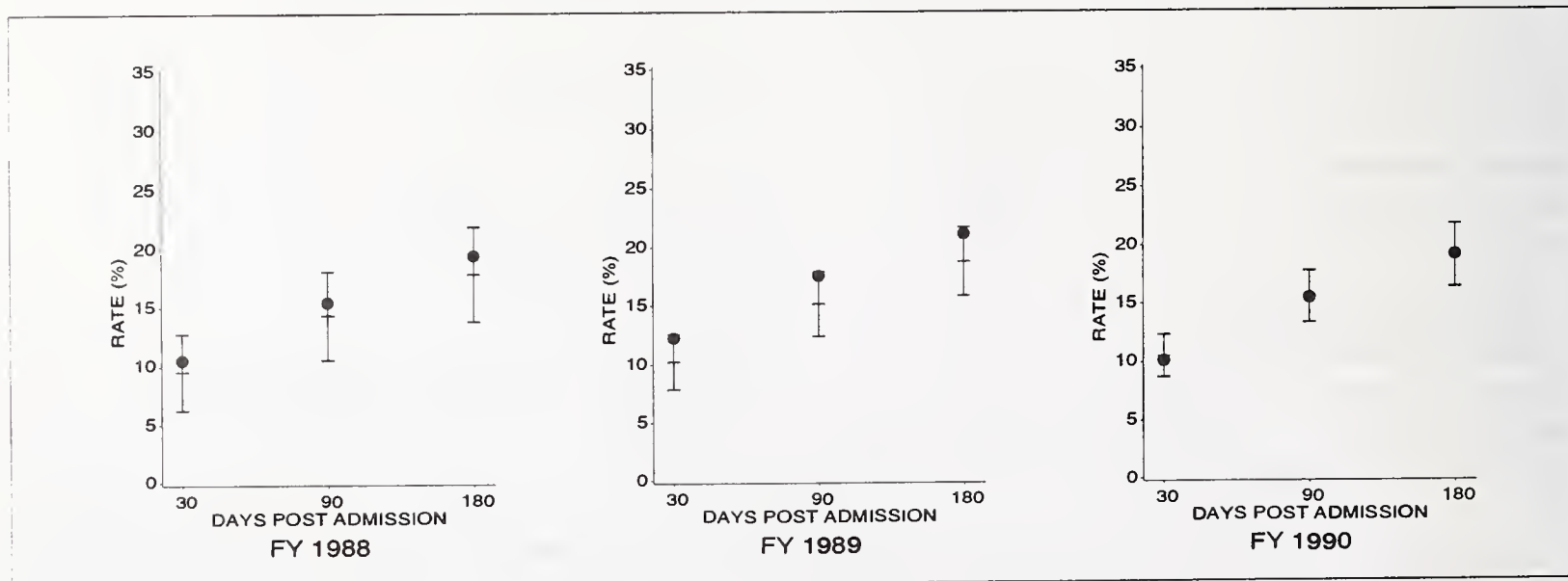
164 HIGH ST  
GREENFIELD, MA 01301  
Medicare Provider Number: 220016

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1392               | 10.1                | 10.5 | 0.9   | 15.4    | 15.5 | 1.1   | 19.1     | 19.0 | 1.4   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 61                 | 29.5                | 28.0 | 6.0   | 32.8    | 31.3 | 6.1   | 32.8     | 34.2 | 6.1   |
| Congestive Heart Failure.....              | 97                 | 10.3                | 13.8 | 5.1   | 25.8    | 22.2 | 5.5   | 35.1     | 28.5 | 6.3   |
| Pneumonia/Influenza.....                   | 102                | 10.8                | 18.6 | 5.1   | 15.7    | 25.3 | 6.8   | 18.6     | 29.6 | 6.7   |
| Chronic Obstructive Pulmonary Disease..... | 19                 | 10.5                | 8.9  | ----- | 10.5    | 14.5 | ----- | 15.8     | 19.0 | ----- |
| Transient Cerebral Ischemia.....           | 12                 | 8.3                 | 1.7  | ----- | 16.7    | 4.1  | ----- | 25.0     | 7.0  | ----- |
| Stroke.....                                | 68                 | 22.1                | 22.0 | 5.0   | 26.5    | 28.6 | 6.3   | 30.9     | 32.5 | 7.8   |
| Hip Fracture.....                          | 59                 | 5.1                 | 8.4  | 5.6   | 8.5     | 14.5 | 7.8   | 11.9     | 18.5 | 9.1   |
| Sepsis.....                                | 7                  | 14.3                | 16.8 | ----- | 14.3    | 21.9 | ----- | 14.3     | 25.5 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 8                  | 0.0                 | 1.9  | ----- | 0.0     | 3.9  | ----- | 0.0      | 6.1  | ----- |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 37                 | 5.4                 | 3.8  | ----- | 5.4     | 6.7  | ----- | 10.8     | 8.7  | ----- |
| Open Reduction of Hip Fracture.....        | 32                 | 3.1                 | 8.4  | ----- | 6.3     | 15.0 | ----- | 9.4      | 19.3 | ----- |
| Prostatectomy.....                         | 54                 | 0.0                 | 0.8  | 1.8   | 0.0     | 1.8  | 4.0   | 1.9      | 3.2  | 5.6   |
| Cholecystectomy.....                       | 21                 | 4.8                 | 2.7  | ----- | 4.8     | 4.6  | ----- | 4.8      | 5.7  | ----- |
| Hysterectomy.....                          | 21                 | 0.0                 | 0.2  | ----- | 0.0     | 0.6  | ----- | 0.0      | 0.9  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# FRANKLIN MEDICAL CENTER

Medicare Provider Number: 220016

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.4 years  
Proportion female..... 58.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 36.7 %  
Transferred from skilled nursing facility..... 0.2 %  
Admitted for elective procedure..... 16.2 %  
Admitted for emergency..... 58.2 %

### COMORBIDITIES:

Cancer..... 7.5 %  
Chronic cardiovascular disease..... 40.8 %  
Chronic liver disease..... 0.4 %  
Chronic renal disease..... 4.1 %  
Chronic pulmonary disease..... 20.5 %  
Cerebrovascular degeneration..... 4.5 %  
Diabetes mellitus..... 5.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 87.5%  
State ..... 6.9%  
Outside State ..... 5.6%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 6.7 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 125  
Occupancy Rate ..... 71.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 37.6 %  
Case Mix Index (CMI) ..... 1.1593

### STAFFING:

Total Number of Physicians..... 73  
Percent of Physicians Board  
Certified Specialists..... 86.3 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 159  
Licensed Practical Nurses..... 16

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# GLOVER MEMORIAL HOSPITAL

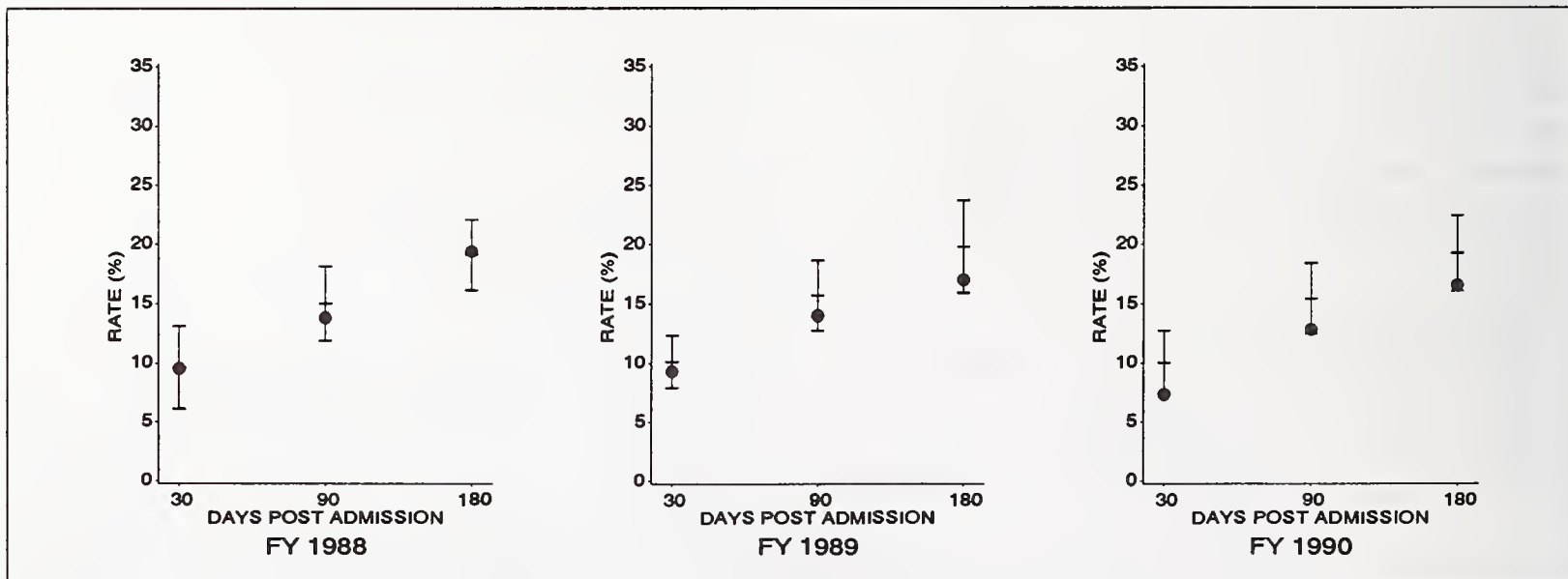
148 CHESTNUT ST  
NEEDHAM, MA 02192  
Medicare Provider Number: 220083

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1012               | 7.3                 | 10.0 | 1.4   | 12.8    | 15.4 | 1.5   | 16.5     | 19.2 | 1.6   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial infarction.....           | 37                 | 29.7                | 31.1 | ----- | 32.4    | 34.1 | ----- | 32.4     | 36.8 | ----- |
| Congestive Heart Failure.....              | 56                 | 5.4                 | 16.9 | 6.6   | 17.9    | 26.3 | 8.0   | 25.0     | 32.7 | 7.4   |
| Pneumonia/influenza.....                   | 57                 | 12.3                | 17.2 | 7.5   | 24.6    | 23.3 | 6.9   | 24.6     | 27.2 | 6.4   |
| Chronic Obstructive Pulmonary Disease..... | 8                  | 0.0                 | 8.4  | ----- | 0.0     | 14.7 | ----- | 0.0      | 19.2 | ----- |
| Transient Cerebral Ischemia.....           | 18                 | 0.0                 | 1.4  | ----- | 0.0     | 3.4  | ----- | 11.1     | 5.7  | ----- |
| Stroke.....                                | 35                 | 20.0                | 23.4 | ----- | 31.4    | 31.8 | ----- | 34.3     | 36.0 | ----- |
| Hip Fracture.....                          | 37                 | 10.8                | 8.7  | ----- | 13.5    | 15.9 | ----- | 13.5     | 20.9 | ----- |
| Sepsis.....                                | 10                 | 10.0                | 21.8 | ----- | 20.0    | 29.3 | ----- | 30.0     | 33.9 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 12                 | 8.3                 | 2.7  | ----- | 8.3     | 4.7  | ----- | 8.3      | 6.6  | ----- |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 23                 | 4.3                 | 8.1  | ----- | 4.3     | 15.2 | ----- | 4.3      | 20.4 | ----- |
| Open Reduction of Hip Fracture.....        | 15                 | 20.0                | 8.3  | ----- | 20.0    | 16.5 | ----- | 20.0     | 22.6 | ----- |
| Prostatectomy.....                         | 30                 | 3.3                 | 1.4  | ----- | 3.3     | 3.0  | ----- | 3.3      | 4.8  | ----- |
| Cholecystectomy.....                       | 10                 | 0.0                 | 3.4  | ----- | 0.0     | 7.2  | ----- | 0.0      | 10.4 | ----- |
| Hysterectomy.....                          | 5                  | 0.0                 | 0.1  | ----- | 0.0     | 0.4  | ----- | 0.0      | 0.8  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# GLOVER MEMORIAL HOSPITAL

Medicare Provider Number: 220083

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 78.9 years  
Proportion female..... 65.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 35.5 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 18.3 %  
Admitted for emergency..... 68.9 %

### COMORBIDITIES:

Cancer..... 6.7 %  
Chronic cardiovascular disease..... 35.1 %  
Chronic liver disease..... 0.6 %  
Chronic renal disease..... 2.4 %  
Chronic pulmonary disease..... 13.1 %  
Cerebrovascular degeneration..... 5.0 %  
Diabetes mellitus..... 4.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 83.1%  
State ..... 14.3%  
Outside State ..... 2.6%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.3 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 77  
Occupancy Rate ..... 67.0 %  
Ownership/Control..... Local Government  
Medicare Discharges ..... 55.7 %  
Case Mix Index (CMI) ..... 1.1831

### STAFFING:

Total Number of Physicians..... 69  
Percent of Physicians Board  
Certified Specialists..... 87.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 44  
Licensed Practical Nurses..... 5

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# GODDARD MEMORIAL HOSPITAL

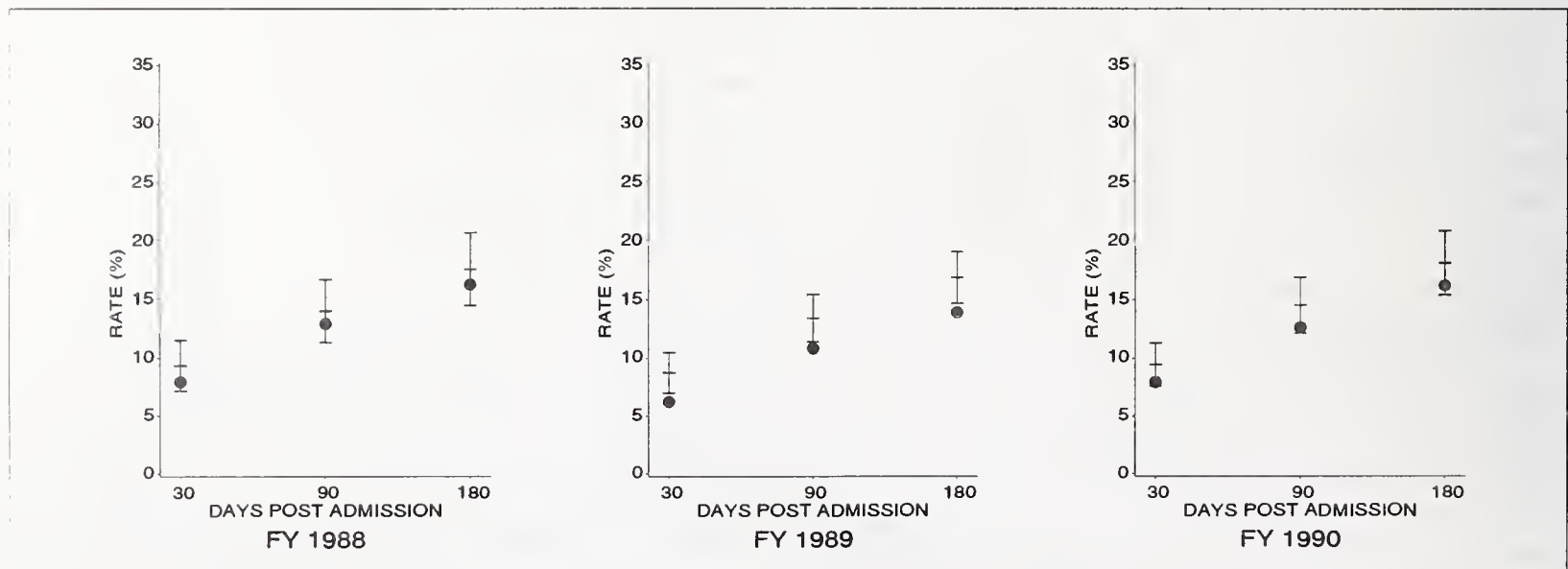
909 SUMMER ST  
STOUGHTON, MA 02072  
Medicare Provider Number: 220111

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1713            | 7.9                 | 9.4  | 0.9  | 12.6    | 14.5 | 1.2  | 16.2     | 18.1 | 1.4  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 69              | 24.6                | 26.3 | 7.7  | 29.0    | 29.7 | 8.0  | 33.3     | 32.4 | 7.9  |
| Congestive Heart Failure.....              | 85              | 15.3                | 16.0 | 6.7  | 21.2    | 25.9 | 8.5  | 29.4     | 32.8 | 9.7  |
| Pneumonia/Influenza.....                   | 70              | 18.6                | 17.9 | 4.6  | 21.4    | 23.9 | 5.4  | 22.9     | 27.9 | 6.2  |
| Chronic Obstructive Pulmonary Disease..... | 22              | 13.6                | 10.3 | ---- | 13.6    | 17.6 | ---- | 13.6     | 22.6 | ---- |
| Transient Cerebral Ischemia.....           | 25              | 0.0                 | 1.6  | ---- | 4.0     | 3.5  | ---- | 8.0      | 5.7  | ---- |
| Stroke.....                                | 57              | 14.0                | 19.2 | 6.0  | 15.8    | 27.1 | 7.9  | 17.5     | 31.3 | 8.9  |
| Hip Fracture.....                          | 36              | 5.6                 | 8.2  | ---- | 16.7    | 14.3 | ---- | 16.7     | 18.3 | ---- |
| Sepsis.....                                | 16              | 6.3                 | 24.6 | ---- | 12.5    | 34.3 | ---- | 31.3     | 39.6 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 34              | 0.0                 | 5.1  | ---- | 5.9     | 9.6  | ---- | 14.7     | 13.3 | ---- |
| Carotid Endarterectomy.....                | 5               | 0.0                 | 0.8  | ---- | 0.0     | 1.6  | ---- | 0.0      | 2.6  | ---- |
| Hip Replacement/Reconstruction.....        | 15              | 0.0                 | 3.4  | ---- | 6.7     | 6.0  | ---- | 6.7      | 7.6  | ---- |
| Open Reduction of Hip Fracture.....        | 11              | 0.0                 | 7.9  | ---- | 9.1     | 14.0 | ---- | 9.1      | 18.2 | ---- |
| Prostatectomy.....                         | 46              | 0.0                 | 0.9  | ---- | 4.3     | 2.2  | ---- | 4.3      | 3.7  | ---- |
| Cholecystectomy.....                       | 38              | 0.0                 | 2.6  | ---- | 0.0     | 4.8  | ---- | 0.0      | 6.4  | ---- |
| Hysterectomy.....                          | 11              | 0.0                 | 0.7  | ---- | 0.0     | 1.7  | ---- | 0.0      | 2.7  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# GODDARD MEMORIAL HOSPITAL

Medicare Provider Number: 220111

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.7 years  
Proportion female..... 59.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 35.5 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 14.5 %  
Admitted for emergency..... 56.2 %

### COMORBIDITIES:

Cancer..... 8.4 %  
Chronic cardiovascular disease..... 43.1 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 3.6 %  
Chronic pulmonary disease..... 15.5 %  
Cerebrovascular degeneration..... 6.0 %  
Diabetes mellitus..... 7.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 34.5%  
State ..... 64.2%  
Outside State ..... 1.3%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 13.0 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 236  
Occupancy Rate ..... 74.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 28.4 %  
Case Mix Index (CMI) ..... 1.1761

### STAFFING:

Total Number of Physicians..... 146  
Percent of Physicians Board  
Certified Specialists ..... 93.8 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 180  
Licensed Practical Nurses ..... 57

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# HANNEMANN HOSPITAL

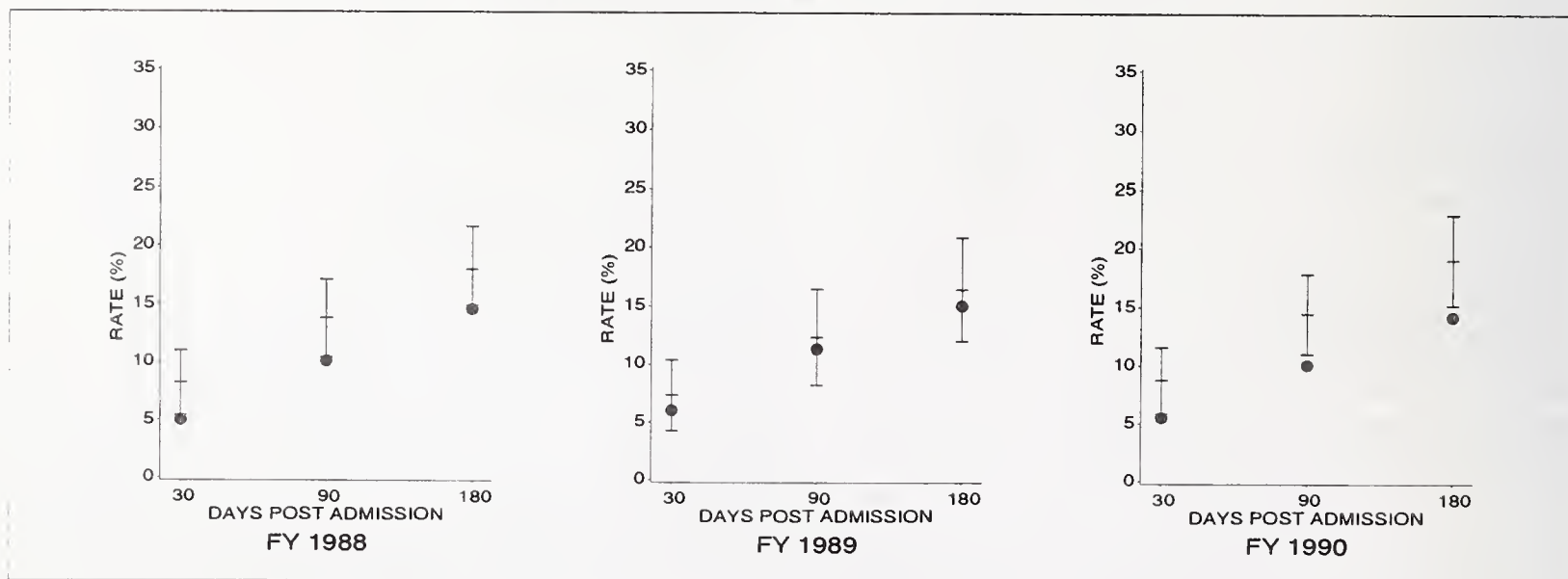
1515 COMMONWEALTH AVE  
BRIGHTON, MA 02135  
Medicare Provider Number: 220120

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 632             | 5.5                 | 8.7  | 1.4   | 10.0    | 14.4 | 1.7   | 14.1     | 19.0 | 1.9   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Congestive Heart Failure.....              | 5               | 40.0                | 28.6 | ----- | 60.0    | 40.8 | ----- | 60.0     | 48.6 | ----- |
| Pneumonia/Influenza.....                   | 58              | 19.0                | 24.6 | 7.5   | 24.1    | 34.9 | 9.1   | 31.0     | 41.6 | 10.0  |
| Chronic Obstructive Pulmonary Disease..... | 2               | 0.0                 | 7.4  | ----- | 0.0     | 14.3 | ----- | 0.0      | 20.0 | ----- |
| Transient Cerebral Ischemia.....           | 3               | 0.0                 | 6.7  | ----- | 0.0     | 16.2 | ----- | 0.0      | 25.7 | ----- |
| Stroke.....                                | 5               | 0.0                 | 13.5 | ----- | 20.0    | 22.3 | ----- | 20.0     | 28.2 | ----- |
| Hip Fracture.....                          | 2               | 0.0                 | 12.3 | ----- | 0.0     | 26.3 | ----- | 0.0      | 36.7 | ----- |
| Sepsis.....                                | 32              | 28.1                | 35.4 | ----- | 37.5    | 46.7 | ----- | 43.8     | 53.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 1               | 0.0                 | 1.3  | ----- | 0.0     | 2.6  | ----- | 0.0      | 3.6  | ----- |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 2               | 0.0                 | 2.7  | ----- | 50.0    | 6.1  | ----- | 50.0     | 10.0 | ----- |
| Cholecystectomy.....                       | 0               |                     |      |       |         |      |       |          |      |       |
| Hysterectomy.....                          | 0               |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# HANNEMANN HOSPITAL

Medicare Provider Number: 220120

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.6 years  
Proportion female..... 72.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 35.0 %  
Transferred from skilled nursing facility..... 60.8 %  
Admitted for elective procedure..... 3.5 %  
Admitted for emergency..... 0.5 %

### COMORBIDITIES:

Cancer..... 2.1 %  
Chronic cardiovascular disease..... 26.4 %  
Chronic liver disease..... 0.0 %  
Chronic renal disease..... 1.4 %  
Chronic pulmonary disease..... 12.7 %  
Cerebrovascular degeneration..... 22.3 %  
Diabetes mellitus..... 6.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 18.6%  
State ..... 73.1%  
Outside State ..... 8.3%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.7 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 52  
Ownership/Control..... Private, Non-Profit  
Case Mix Index (CMI) ..... 0.9870

### STAFFING:

Medical Residents/Interns ..... 3  
Registered Nurses..... 27  
Licensed Practical Nurses..... 4

### SPECIALTY SERVICES:

Burn Unit ..... No  
Coronary Care Unit ..... No  
Hospice Care ..... No  
Intensive Care Unit ..... No  
Organ Transplant ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# HARRINGTON MEMORIAL HOSPITAL

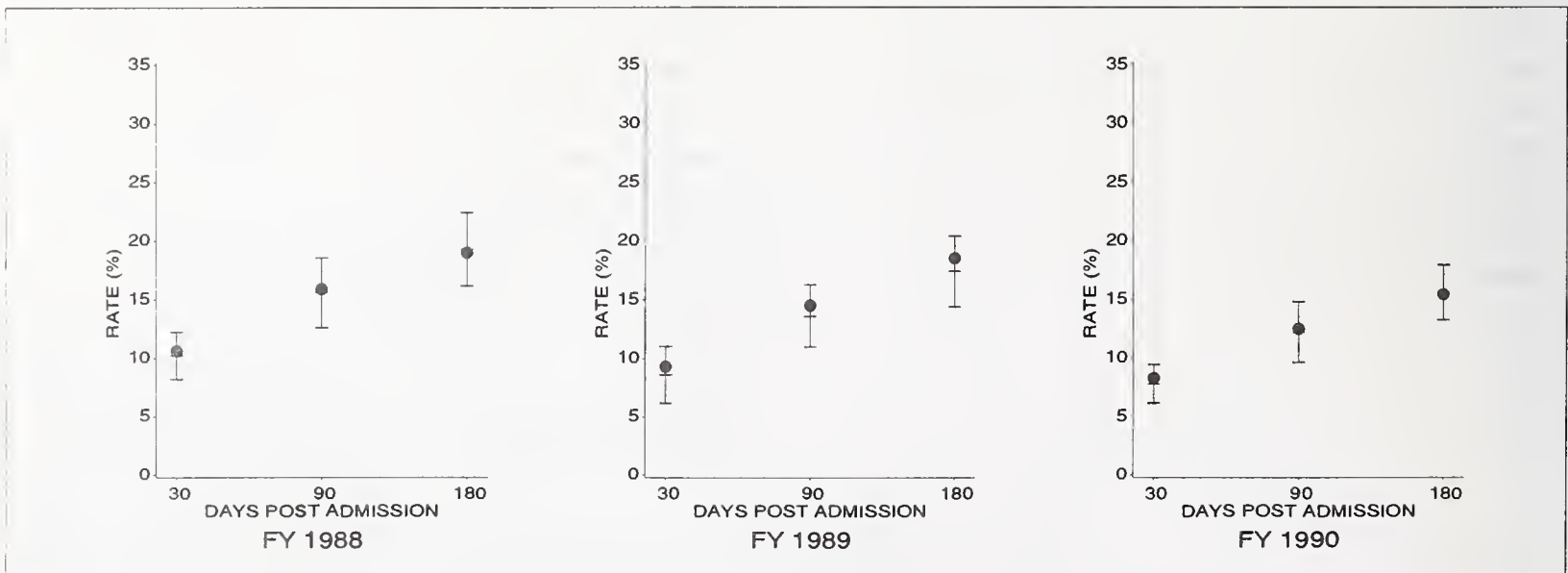
100 SOUTH ST  
SOUTHBRIDGE, MA 01550  
Medicare Provider Number: 220019

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1076               | 8.3                 | 7.8  | 0.8  | 12.5    | 12.2 | 1.3  | 15.4     | 15.6 | 1.2  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 40                 | 20.0                | 24.4 | ---- | 20.0    | 26.9 | ---- | 22.5     | 29.3 | ---- |
| Congestive Heart Failure.....              | 53                 | 7.5                 | 15.3 | 9.0  | 24.5    | 24.5 | 7.8  | 32.1     | 31.0 | 6.6  |
| Pneumonia/Influenza.....                   | 39                 | 12.8                | 14.3 | ---- | 20.5    | 19.7 | ---- | 23.1     | 23.7 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 11                 | 0.0                 | 6.0  | ---- | 0.0     | 10.6 | ---- | 0.0      | 14.3 | ---- |
| Transient Cerebral Ischemia.....           | 21                 | 9.5                 | 1.4  | ---- | 14.3    | 3.3  | ---- | 23.8     | 5.6  | ---- |
| Stroke.....                                | 27                 | 18.5                | 17.9 | ---- | 29.6    | 24.5 | ---- | 37.0     | 28.4 | ---- |
| Hip Fracture.....                          | 32                 | 3.1                 | 6.5  | ---- | 9.4     | 12.0 | ---- | 15.6     | 16.0 | ---- |
| Sepsis.....                                | 14                 | 7.1                 | 27.3 | ---- | 14.3    | 33.5 | ---- | 21.4     | 38.4 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 14                 | 0.0                 | 4.0  | ---- | 7.1     | 7.4  | ---- | 14.3     | 10.2 | ---- |
| Carotid Endarterectomy.....                | 5                  | 0.0                 | 1.0  | ---- | 0.0     | 1.9  | ---- | 0.0      | 2.8  | ---- |
| Hip Replacement/Reconstruction.....        | 28                 | 0.0                 | 3.4  | ---- | 3.6     | 6.3  | ---- | 7.1      | 8.7  | ---- |
| Open Reduction of Hip Fracture.....        | 15                 | 0.0                 | 4.6  | ---- | 6.7     | 8.7  | ---- | 6.7      | 11.8 | ---- |
| Prostatectomy.....                         | 61                 | 0.0                 | 0.9  | 1.5  | 0.0     | 2.2  | 3.1  | 1.6      | 3.7  | 3.8  |
| Cholecystectomy.....                       | 15                 | 0.0                 | 3.7  | ---- | 0.0     | 6.1  | ---- | 0.0      | 7.5  | ---- |
| Hysterectomy.....                          | 6                  | 0.0                 | 0.1  | ---- | 0.0     | 0.2  | ---- | 0.0      | 0.3  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# HARRINGTON MEMORIAL HOSPITAL

Medicare Provider Number: 220019

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.7 years  
Proportion female..... 57.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 61.2 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 9.5 %  
Admitted for emergency..... 6.0 %

### COMORBIDITIES:

Cancer..... 7.6 %  
Chronic cardiovascular disease..... 40.2 %  
Chronic liver disease..... 0.3 %  
Chronic renal disease..... 1.5 %  
Chronic pulmonary disease..... 11.8 %  
Cerebrovascular degeneration..... 5.9 %  
Diabetes mellitus..... 7.1 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 86.9%  
State ..... 7.4%  
Outside State ..... 5.7%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.5 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 121  
Occupancy Rate ..... 71.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 35.8 %  
Case Mix Index (CMI) ..... 1.0829

### STAFFING:

Total Number of Physicians..... 53  
Percent of Physicians Board  
Certified Specialists..... 79.2 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 85  
Licensed Practical Nurses ..... 27

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# HAVERHILL MUNICIPAL HOSPITAL

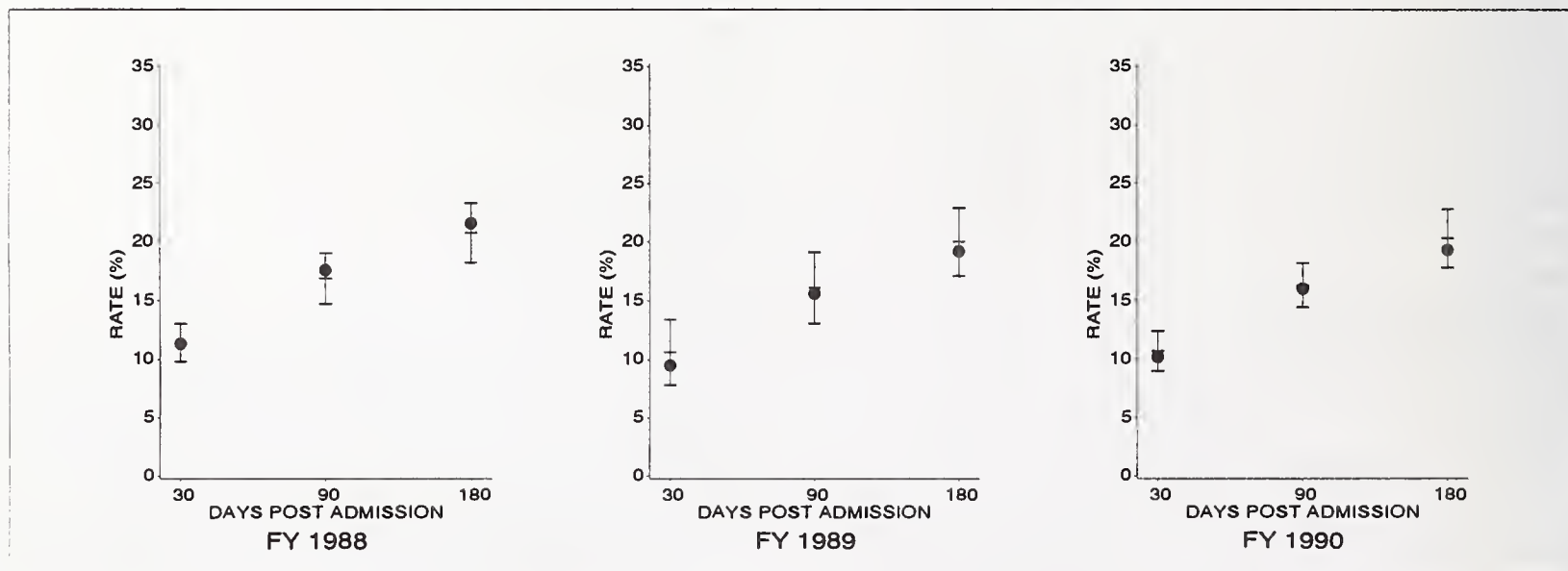
140 LINCOLN AVENUE  
HAVERHILL, MA 01830  
Medicare Provider Number: 220041

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1655            | 10.2                | 10.7 | 0.9   | 16.0    | 16.3 | 0.9   | 19.3     | 20.3 | 1.3   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 74              | 32.4                | 27.1 | 11.8  | 37.8    | 30.4 | 11.9  | 40.5     | 33.1 | 12.0  |
| Congestive Heart Failure.....              | 145             | 12.4                | 15.0 | 6.1   | 20.7    | 24.0 | 5.7   | 31.0     | 30.5 | 5.8   |
| Pneumonia/Influenza.....                   | 113             | 19.5                | 17.8 | 3.9   | 27.4    | 24.8 | 4.8   | 31.9     | 29.5 | 4.7   |
| Chronic Obstructive Pulmonary Disease..... | 26              | 7.7                 | 9.1  | ----- | 19.2    | 16.2 | ----- | 19.2     | 21.5 | ----- |
| Transient Cerebral Ischemia.....           | 28              | 0.0                 | 1.5  | ----- | 0.0     | 3.5  | ----- | 0.0      | 5.8  | ----- |
| Stroke.....                                | 64              | 10.9                | 17.8 | 5.9   | 14.1    | 24.3 | 7.1   | 17.2     | 28.4 | 7.9   |
| Hip Fracture.....                          | 60              | 1.7                 | 6.1  | 4.5   | 5.0     | 11.1 | 6.3   | 10.0     | 14.8 | 6.4   |
| Sepsis.....                                | 28              | 28.6                | 26.6 | ----- | 35.7    | 36.0 | ----- | 46.4     | 40.7 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 17              | 0.0                 | 4.1  | ----- | 0.0     | 8.1  | ----- | 0.0      | 11.7 | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 25              | 0.0                 | 4.3  | ----- | 4.0     | 8.1  | ----- | 4.0      | 11.0 | ----- |
| Open Reduction of Hip Fracture.....        | 33              | 3.0                 | 5.6  | ----- | 6.1     | 10.5 | ----- | 12.1     | 14.2 | ----- |
| Prostatectomy.....                         | 48              | 2.1                 | 0.9  | ----- | 2.1     | 2.1  | ----- | 4.2      | 3.7  | ----- |
| Cholecystectomy.....                       | 19              | 0.0                 | 2.1  | ----- | 5.3     | 4.1  | ----- | 5.3      | 5.7  | ----- |
| Hysterectomy.....                          | 9               | 0.0                 | 0.2  | ----- | 0.0     | 0.4  | ----- | 0.0      | 0.8  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# HAVERHILL MUNICIPAL HOSPITAL

Medicare Provider Number: 220041

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.1 years  
Proportion female..... 61.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 34.4 %  
Transferred from skilled nursing facility..... 0.2 %  
Admitted for elective procedure..... 23.3 %  
Admitted for emergency..... 71.4 %

### COMORBIDITIES:

Cancer..... 9.3 %  
Chronic cardiovascular disease..... 38.2 %  
Chronic liver disease..... 1.0 %  
Chronic renal disease..... 2.7 %  
Chronic pulmonary disease..... 23.1 %  
Cerebrovascular degeneration..... 8.7 %  
Diabetes mellitus..... 9.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 84.1%  
State ..... 3.5%  
Outside State ..... 12.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 11.1 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 168  
Occupancy Rate ..... 76.0 %  
Ownership/Control..... Local Government  
Medicare Discharges ..... 40.3 %  
Case Mix Index (CMI) ..... 1.1641

### STAFFING:

Total Number of Physicians..... 80  
Percent of Physicians Board  
Certified Specialists..... 83.8 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 154  
Licensed Practical Nurses..... 50

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# HENRY HEYWOOD MEMORIAL HOSPITAL

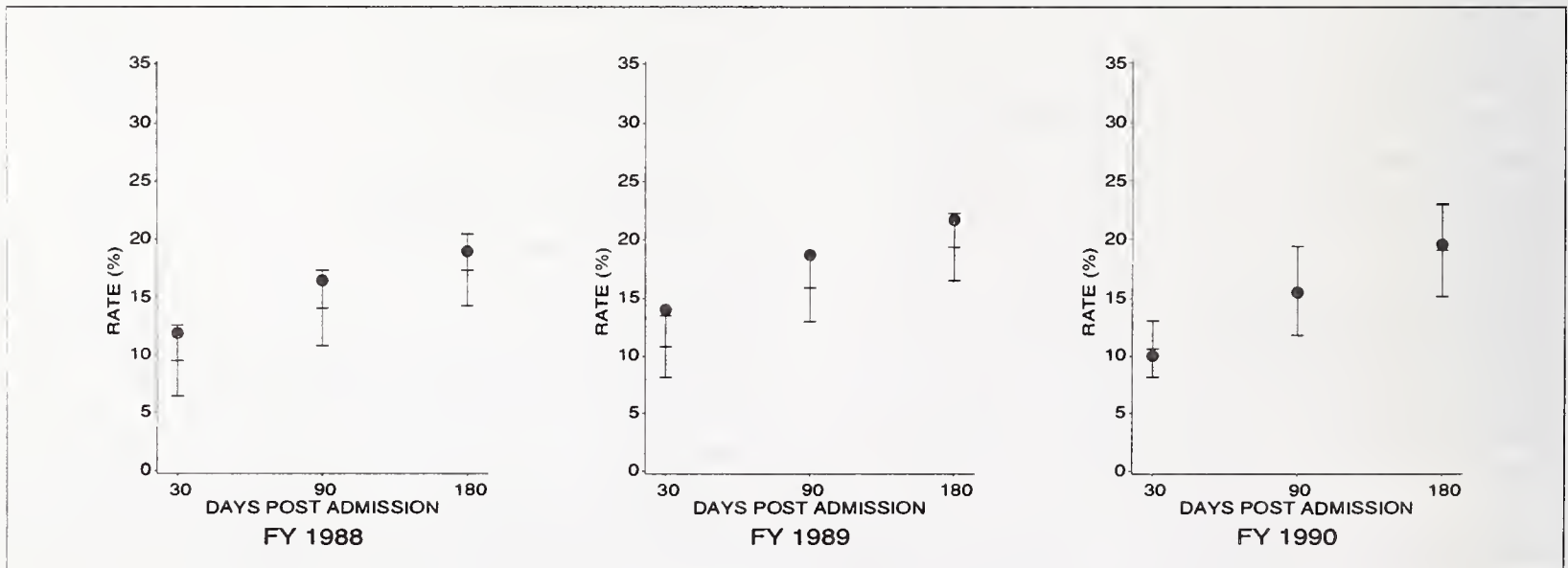
242 GREEN ST  
GARDNER, MA 01440  
Medicare Provider Number: 220095

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1115               | 10.0                | 10.6 | 1.2   | 15.5    | 15.6 | 1.9   | 19.6     | 19.1 | 2.0   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 51                 | 33.3                | 26.7 | 13.4  | 39.2    | 29.6 | 13.3  | 39.2     | 32.3 | 13.3  |
| Congestive Heart Failure.....              | 83                 | 8.4                 | 15.6 | 5.8   | 15.7    | 24.7 | 7.2   | 22.9     | 31.2 | 7.1   |
| Pneumonia/Influenza.....                   | 51                 | 17.6                | 17.1 | 5.6   | 21.6    | 23.2 | 7.3   | 25.5     | 27.1 | 9.2   |
| Chronic Obstructive Pulmonary Disease..... | 15                 | 6.7                 | 5.4  | ----- | 13.3    | 10.6 | ----- | 13.3     | 15.1 | ----- |
| Transient Cerebral Ischemia.....           | 20                 | 0.0                 | 1.7  | ----- | 0.0     | 4.2  | ----- | 5.0      | 7.1  | ----- |
| Stroke.....                                | 47                 | 17.0                | 22.2 | ----- | 21.3    | 28.5 | ----- | 31.9     | 32.4 | ----- |
| Hip Fracture.....                          | 36                 | 0.0                 | 5.8  | ----- | 5.6     | 10.4 | ----- | 8.3      | 13.6 | ----- |
| Sepsis.....                                | 10                 | 10.0                | 26.4 | ----- | 20.0    | 34.7 | ----- | 30.0     | 39.0 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 6                  | 0.0                 | 5.5  | ----- | 0.0     | 9.8  | ----- | 16.7     | 13.0 | ----- |
| Carotid Endarterectomy.....                | 4                  | 0.0                 | 1.0  | ----- | 0.0     | 1.9  | ----- | 0.0      | 2.8  | ----- |
| Hip Replacement/Reconstruction.....        | 23                 | 0.0                 | 4.2  | ----- | 4.3     | 7.5  | ----- | 4.3      | 10.1 | ----- |
| Open Reduction of Hip Fracture.....        | 5                  | 0.0                 | 3.9  | ----- | 0.0     | 7.4  | ----- | 0.0      | 10.5 | ----- |
| Prostatectomy.....                         | 21                 | 0.0                 | 0.5  | ----- | 0.0     | 1.2  | ----- | 0.0      | 2.2  | ----- |
| Cholecystectomy.....                       | 18                 | 0.0                 | 2.9  | ----- | 5.6     | 5.3  | ----- | 5.6      | 6.7  | ----- |
| Hysterectomy.....                          | 3                  | 0.0                 | 0.2  | ----- | 0.0     | 0.6  | ----- | 0.0      | 0.9  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# HENRY HEYWOOD MEMORIAL HOSPITAL

Medicare Provider Number: 220095

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.0 years  
Proportion female..... 57.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 33.8 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 13.9 %  
Admitted for emergency..... 81.6 %

### COMORBIDITIES:

Cancer..... 7.0 %  
Chronic cardiovascular disease..... 41.2 %  
Chronic liver disease..... 1.3 %  
Chronic renal disease..... 2.9 %  
Chronic pulmonary disease..... 14.8 %  
Cerebrovascular degeneration..... 4.2 %  
Diabetes mellitus..... 6.1 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 95.5%  
State ..... 2.0%  
Outside State ..... 2.5%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.6 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 124  
Occupancy Rate ..... 59.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 38.3 %  
Case Mix Index (CMI) ..... 1.1790

### STAFFING:

Total Number of Physicians..... 47  
Percent of Physicians Board  
Certified Specialists ..... 76.6 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 115  
Licensed Practical Nurses ..... 26

\*\* Except for CMI

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric..... Yes  
Medicare Swing Beds ..... No

\* Not used in calculating mortality rates

# HERITAGE HOSPITAL

26 CENTRAL ST  
SOMERVILLE, MA 02143  
Medicare Provider Number: 220068

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |     |         |      |     |          |      |     |
|--------------------------------------------|--------------------|---------------------|------|-----|---------|------|-----|----------|------|-----|
|                                            |                    | 30 DAYS             |      |     | 90 DAYS |      |     | 180 DAYS |      |     |
|                                            |                    | OBS                 | PRED | SD* | OBS     | PRED | SD* | OBS      | PRED | SD* |
| ALL CAUSES.....                            | 183                | 0.0                 | 0.5  | 0.8 | 1.1     | 1.4  | 1.0 | 1.6      | 2.5  | 1.8 |
| CONDITIONS:                                |                    |                     |      |     |         |      |     |          |      |     |
| Acute Myocardial Infarction.....           | 0                  |                     |      |     |         |      |     |          |      |     |
| Congestive Heart Failure.....              | 0                  |                     |      |     |         |      |     |          |      |     |
| Pneumonia/Influenza.....                   | 0                  |                     |      |     |         |      |     |          |      |     |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |     |         |      |     |          |      |     |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |     |         |      |     |          |      |     |
| Stroke.....                                | 0                  |                     |      |     |         |      |     |          |      |     |
| Hip Fracture.....                          | 0                  |                     |      |     |         |      |     |          |      |     |
| Sepsis.....                                | 0                  |                     |      |     |         |      |     |          |      |     |
| PROCEDURES:                                |                    |                     |      |     |         |      |     |          |      |     |
| Angioplasty.....                           | 0                  |                     |      |     |         |      |     |          |      |     |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |     |         |      |     |          |      |     |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |     |         |      |     |          |      |     |
| Carotid Endarterectomy.....                | 0                  |                     |      |     |         |      |     |          |      |     |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |     |         |      |     |          |      |     |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |     |         |      |     |          |      |     |
| Prostatectomy.....                         | 0                  |                     |      |     |         |      |     |          |      |     |
| Cholecystectomy.....                       | 0                  |                     |      |     |         |      |     |          |      |     |
| Hysterectomy.....                          | 0                  |                     |      |     |         |      |     |          |      |     |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES

No Graphs are presented when the standard deviation  
was not computed for one or more of the three fiscal years,  
(1988, 1989, or 1990)

# HERITAGE HOSPITAL

Medicare Provider Number: 220068

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 49.4 years  
Proportion female..... 12.6 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 2.2 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 1.1 %  
Admitted for emergency..... 0.0 %

### COMORBIDITIES:

Cancer..... 0.0 %  
Chronic cardiovascular disease..... 12.0 %  
Chronic liver disease..... 7.1 %  
Chronic renal disease..... 0.0 %  
Chronic pulmonary disease..... 17.5 %  
Cerebrovascular degeneration..... 13.1 %  
Diabetes mellitus..... 2.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 40.6%  
State ..... 56.6%  
Outside State ..... 2.8%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 5.1 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 93  
Ownership/Control..... Private, For Profit  
Case Mix Index (CMI) ..... 0.6405

### STAFFING:

Medical Residents/Interns ..... 5  
Registered Nurses..... 26  
Licensed Practical Nurses..... 3

### SPECIALTY SERVICES:

Burn Unit ..... No  
Coronary Care Unit ..... No  
Hospice Care ..... No  
Intensive Care Unit ..... No  
Organ Transplant ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# HILLCREST HOSPITAL

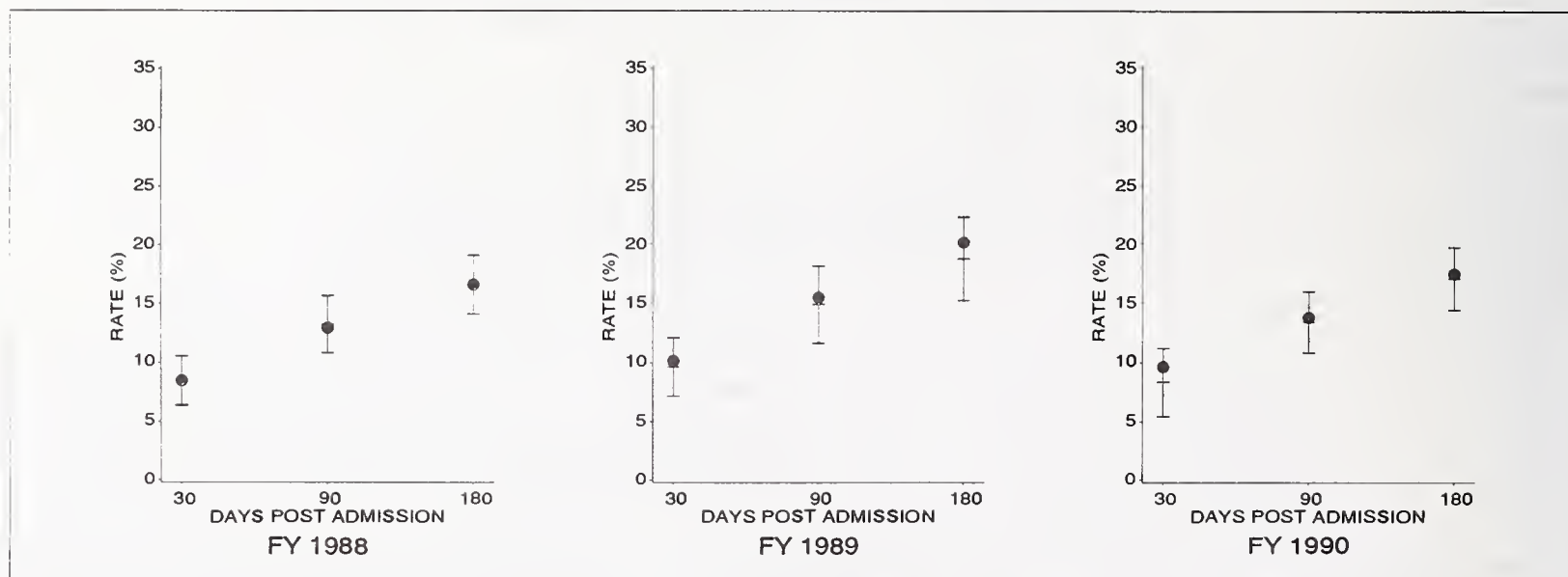
165 TOR COURT  
PITTSFIELD, MA 01201  
Medicare Provider Number: 220107

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 840                | 9.6                 | 8.3  | 1.4   | 13.8    | 13.4 | 1.3   | 17.5     | 17.1 | 1.3   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 19                 | 15.8                | 21.7 | ----- | 15.8    | 24.8 | ----- | 15.8     | 27.7 | ----- |
| Congestive Heart Failure.....              | 47                 | 29.8                | 14.6 | ----- | 34.0    | 23.4 | ----- | 36.2     | 30.2 | ----- |
| Pneumonia/Influenza.....                   | 62                 | 14.5                | 15.0 | 5.1   | 17.7    | 20.9 | 6.2   | 25.8     | 24.8 | 6.5   |
| Chronic Obstructive Pulmonary Disease..... | 20                 | 5.0                 | 5.9  | ----- | 10.0    | 10.6 | ----- | 25.0     | 14.6 | ----- |
| Transient Cerebral Ischemia.....           | 13                 | 0.0                 | 3.8  | ----- | 0.0     | 8.2  | ----- | 7.7      | 12.3 | ----- |
| Stroke.....                                | 25                 | 24.0                | 21.0 | ----- | 28.0    | 29.0 | ----- | 32.0     | 33.7 | ----- |
| Hip Fracture.....                          | 27                 | 7.4                 | 6.7  | ----- | 18.5    | 12.7 | ----- | 22.2     | 17.1 | ----- |
| Sepsis.....                                | 1                  | 100.0               | 63.5 | ----- | 100.0   | 72.0 | ----- | 100.0    | 77.7 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 11                 | 9.1                 | 3.8  | ----- | 9.1     | 7.0  | ----- | 9.1      | 9.5  | ----- |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 18                 | 11.1                | 4.9  | ----- | 11.1    | 9.8  | ----- | 16.7     | 13.5 | ----- |
| Open Reduction of Hip Fracture.....        | 8                  | 0.0                 | 6.1  | ----- | 25.0    | 10.9 | ----- | 25.0     | 14.3 | ----- |
| Prostatectomy.....                         | 20                 | 0.0                 | 2.2  | ----- | 0.0     | 5.0  | ----- | 5.0      | 7.9  | ----- |
| Cholecystectomy.....                       | 10                 | 0.0                 | 3.1  | ----- | 0.0     | 5.8  | ----- | 10.0     | 7.9  | ----- |
| Hysterectomy.....                          | 6                  | 0.0                 | 0.1  | ----- | 0.0     | 0.1  | ----- | 16.7     | 0.3  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# HILLCREST HOSPITAL

Medicare Provider Number: 220107

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.2 years  
Proportion female..... 56.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 98.9 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 0.0 %  
Admitted for emergency..... 98.9 %

### COMORBIDITIES:

Cancer..... 7.7 %  
Chronic cardiovascular disease..... 38.3 %  
Chronic liver disease..... 1.4 %  
Chronic renal disease..... 1.7 %  
Chronic pulmonary disease..... 19.2 %  
Cerebrovascular degeneration..... 6.0 %  
Diabetes mellitus..... 6.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 80.4%  
State ..... 2.8%  
Outside State ..... 16.8%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.9 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 116  
Occupancy Rate ..... 60.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 39.6 %  
Case Mix Index (CMI) ..... 1.1171

### STAFFING:

Total Number of Physicians..... 74  
Percent of Physicians Board  
Certified Specialists..... 85.1 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 107  
Licensed Practical Nurses..... 18

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# HOLY FAMILY HOSPITAL & MEDICAL CENTER

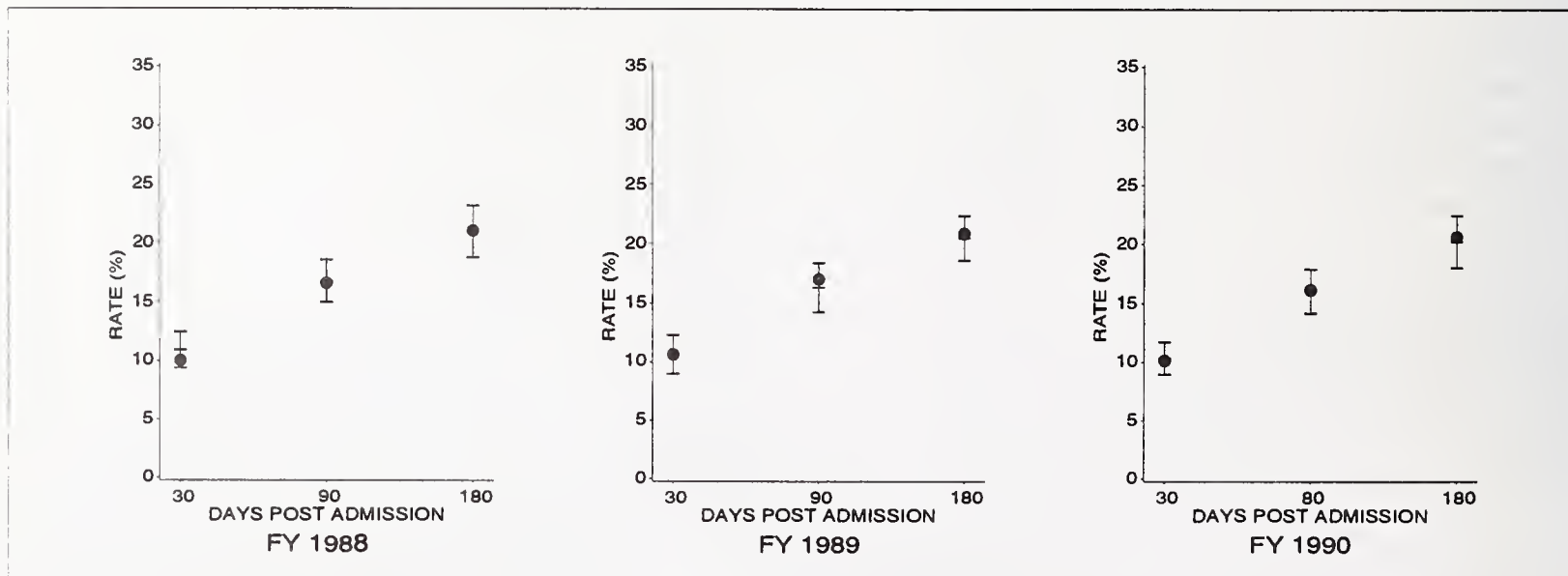
70 EAST ST  
METHUEN, MA 01844  
Medicare Provider Number: 220080

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2116               | 10.1                | 10.3 | 0.7   | 16.1    | 16.0 | 0.9   | 20.6     | 20.2 | 1.1   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 70                 | 27.1                | 29.0 | 5.7   | 34.3    | 32.1 | 5.8   | 34.3     | 35.0 | 6.0   |
| Congestive Heart Failure.....              | 115                | 16.5                | 15.4 | 5.1   | 22.6    | 24.3 | 4.3   | 31.3     | 30.9 | 4.8   |
| Pneumonia/Influenza.....                   | 108                | 23.1                | 20.1 | 5.1   | 29.6    | 27.7 | 5.6   | 36.1     | 32.5 | 6.1   |
| Chronic Obstructive Pulmonary Disease..... | 26                 | 3.8                 | 12.3 | ----- | 15.4    | 21.0 | ----- | 23.1     | 26.4 | ----- |
| Transient Cerebral Ischemia.....           | 46                 | 4.3                 | 2.1  | ----- | 4.3     | 4.5  | ----- | 6.5      | 7.0  | ----- |
| Stroke.....                                | 89                 | 15.7                | 19.7 | 4.8   | 25.8    | 26.7 | 4.7   | 30.3     | 30.7 | 5.8   |
| Hip Fracture.....                          | 49                 | 8.2                 | 6.4  | ----- | 18.4    | 11.4 | ----- | 22.4     | 14.9 | ----- |
| Sepsis.....                                | 22                 | 22.7                | 22.8 | ----- | 40.9    | 31.3 | ----- | 40.9     | 36.6 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 18                 | 5.6                 | 6.6  | ----- | 16.7    | 11.6 | ----- | 22.2     | 15.7 | ----- |
| Carotid Endarterectomy.....                | 15                 | 0.0                 | 1.6  | ----- | 0.0     | 3.0  | ----- | 0.0      | 4.3  | ----- |
| Hip Replacement/Reconstruction.....        | 21                 | 0.0                 | 4.0  | ----- | 9.5     | 7.3  | ----- | 19.0     | 9.6  | ----- |
| Open Reduction of Hip Fracture.....        | 31                 | 9.7                 | 5.8  | ----- | 19.4    | 10.5 | ----- | 22.6     | 13.9 | ----- |
| Prostatectomy.....                         | 51                 | 2.0                 | 1.0  | 1.6   | 2.0     | 2.2  | 2.4   | 3.9      | 3.7  | 2.7   |
| Cholecystectomy.....                       | 25                 | 0.0                 | 1.9  | ----- | 4.0     | 3.5  | ----- | 4.0      | 4.7  | ----- |
| Hysterectomy.....                          | 12                 | 0.0                 | 0.2  | ----- | 0.0     | 0.5  | ----- | 0.0      | 0.9  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# HOLY FAMILY HOSPITAL & MEDICAL CENTER

Medicare Provider Number: 220080

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.7 years  
Proportion female..... 59.1 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 28.0 %  
Transferred from skilled nursing facility..... 1.3 %  
Admitted for elective procedure..... 23.4 %  
Admitted for emergency..... 47.6 %

### COMORBIDITIES:

Cancer..... 13.4 %  
Chronic cardiovascular disease..... 32.6 %  
Chronic liver disease..... 0.5 %  
Chronic renal disease..... 3.5 %  
Chronic pulmonary disease..... 17.3 %  
Cerebrovascular degeneration..... 6.9 %  
Diabetes mellitus..... 6.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 80.9%  
State ..... 3.5%  
Outside State ..... 15.6%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 11.9 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 315  
Occupancy Rate ..... 67.0 %  
Ownership/Control..... Church  
Medicare Discharges ..... 37.9 %  
Case Mix Index (CMI) ..... 1.1509

### STAFFING:

Total Number of Physicians..... 209  
Percent of Physicians Board  
Certified Specialists..... 64.6 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 199  
Licensed Practical Nurses ..... 40

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# HOLYOKE HOSPITAL INC

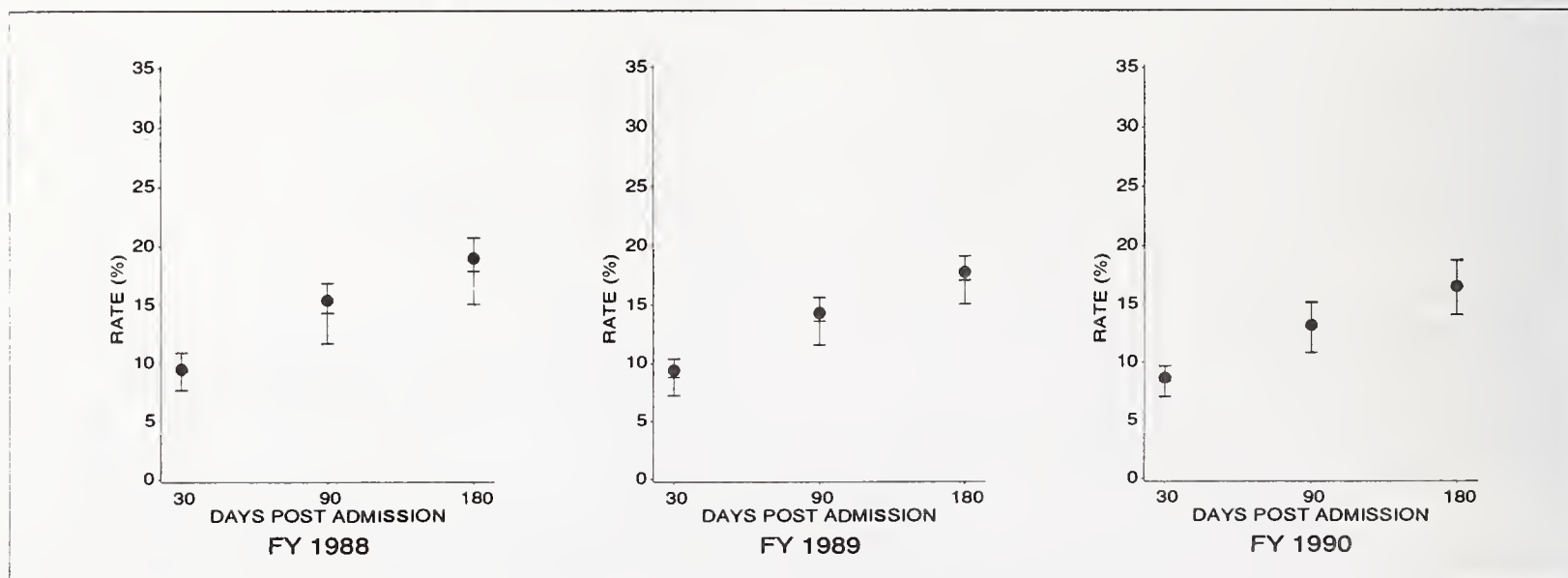
575 BEECH ST  
HOLYOKE, MA 01040  
Medicare Provider Number: 220024

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 2193            | 8.7                 | 8.4  | 0.7  | 13.2    | 13.0 | 1.1  | 16.5     | 16.4 | 1.2  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 93              | 32.3                | 22.7 | 8.0  | 33.3    | 25.9 | 8.5  | 35.5     | 28.7 | 8.3  |
| Congestive Heart Failure.....              | 107             | 14.0                | 14.5 | 3.4  | 23.4    | 23.3 | 4.3  | 30.8     | 29.5 | 5.1  |
| Pneumonia/Influenza.....                   | 121             | 12.4                | 15.7 | 4.2  | 24.8    | 21.8 | 4.3  | 28.9     | 25.8 | 4.7  |
| Chronic Obstructive Pulmonary Disease..... | 38              | 10.5                | 7.5  | ---- | 15.8    | 13.6 | ---- | 18.4     | 18.3 | ---- |
| Transient Cerebral Ischemia.....           | 36              | 0.0                 | 1.5  | ---- | 0.0     | 3.4  | ---- | 2.8      | 5.5  | ---- |
| Stroke.....                                | 74              | 17.6                | 16.9 | 5.0  | 25.7    | 24.1 | 7.0  | 29.7     | 27.9 | 6.6  |
| Hip Fracture.....                          | 73              | 2.7                 | 7.9  | 4.9  | 15.1    | 13.9 | 6.1  | 20.5     | 17.8 | 5.5  |
| Sepsis.....                                | 15              | 20.0                | 16.7 | ---- | 33.3    | 25.0 | ---- | 33.3     | 29.2 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 17              | 11.8                | 3.1  | ---- | 17.6    | 5.7  | ---- | 23.5     | 8.1  | ---- |
| Carotid Endarterectomy.....                | 2               | 0.0                 | 1.3  | ---- | 0.0     | 2.8  | ---- | 0.0      | 4.5  | ---- |
| Hip Replacement/Reconstruction.....        | 31              | 3.2                 | 3.9  | ---- | 16.1    | 7.6  | ---- | 19.4     | 10.5 | ---- |
| Open Reduction of Hip Fracture.....        | 33              | 3.0                 | 8.2  | ---- | 12.1    | 15.0 | ---- | 12.1     | 19.4 | ---- |
| Prostatectomy.....                         | 58              | 1.7                 | 1.1  | 1.5  | 1.7     | 2.6  | 2.2  | 1.7      | 4.4  | 3.5  |
| Cholecystectomy.....                       | 32              | 3.1                 | 3.4  | ---- | 6.3     | 6.5  | ---- | 12.5     | 9.1  | ---- |
| Hysterectomy.....                          | 18              | 0.0                 | 0.8  | ---- | 0.0     | 2.1  | ---- | 0.0      | 3.6  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# HOLYOKE HOSPITAL INC

Medicare Provider Number: 220024

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.2 years  
Proportion female..... 58.6 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 37.4 %  
Transferred from skilled nursing facility..... 0.2 %  
Admitted for elective procedure..... 14.5 %  
Admitted for emergency..... 16.9 %

### COMORBIDITIES:

Cancer..... 6.3 %  
Chronic cardiovascular disease..... 40.9 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 1.6 %  
Chronic pulmonary disease..... 17.7 %  
Cerebrovascular degeneration..... 5.7 %  
Diabetes mellitus..... 12.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 75.3%  
State ..... 23.3%  
Outside State ..... 1.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.8 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 236  
Occupancy Rate ..... 67.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 44.6 %  
Case Mix Index (CMI) ..... 1.1767

### STAFFING:

Total Number of Physicians..... 208  
Percent of Physicians Board  
Certified Specialists..... 84.6 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 142  
Licensed Practical Nurses ..... 59

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# HUBBARD REGIONAL HOSPITAL

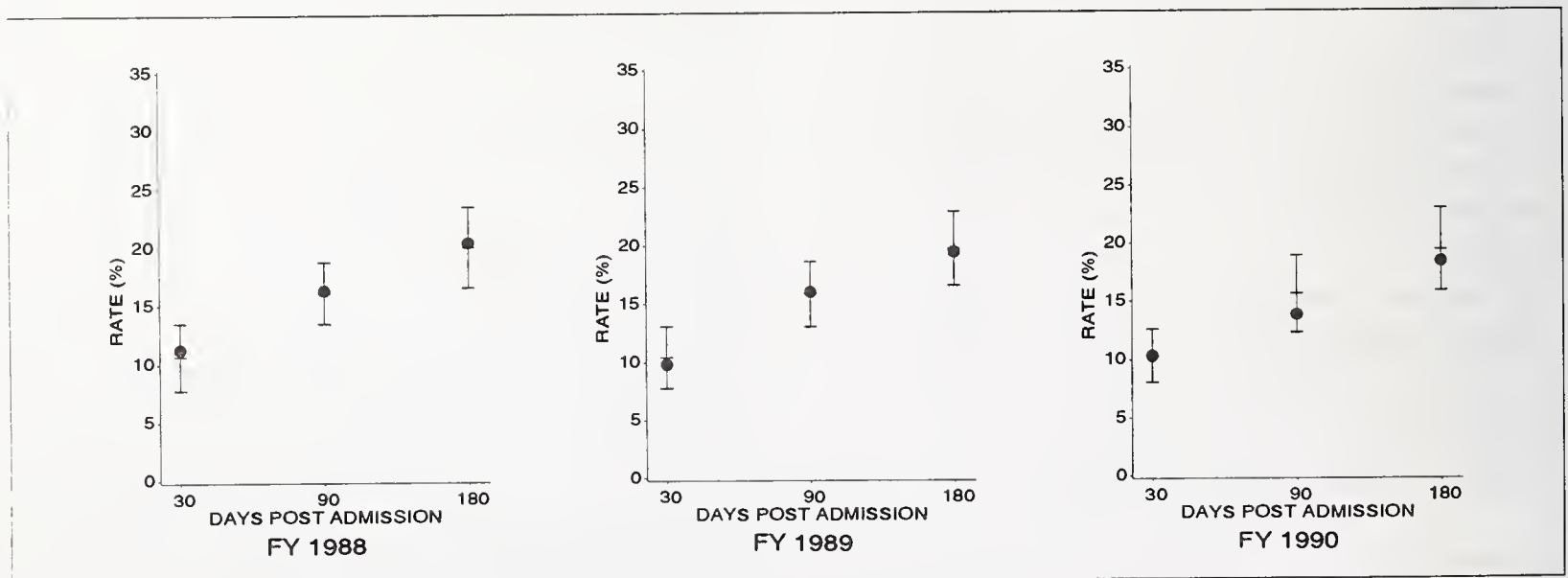
340 THOMPSON ROAD  
WEBSTER, MA 01570  
Medicare Provider Number: 220025

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 773             | 10.3                | 10.3 | 1.1   | 13.8    | 15.6 | 1.7   | 18.4     | 19.4 | 1.8   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 22              | 36.4                | 30.0 | ----- | 45.5    | 32.6 | ----- | 45.5     | 35.1 | ----- |
| Congestive Heart Failure.....              | 51              | 13.7                | 17.7 | 8.4   | 21.6    | 27.5 | 8.2   | 31.4     | 34.3 | 7.4   |
| Pneumonia/Influenza.....                   | 45              | 13.3                | 16.9 | ----- | 13.3    | 23.3 | ----- | 17.8     | 27.7 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 11              | 0.0                 | 9.0  | ----- | 0.0     | 15.2 | ----- | 18.2     | 20.9 | ----- |
| Transient Cerebral Ischemia.....           | 6               | 0.0                 | 1.7  | ----- | 0.0     | 4.0  | ----- | 0.0      | 6.5  | ----- |
| Stroke.....                                | 22              | 22.7                | 23.5 | ----- | 22.7    | 30.7 | ----- | 31.8     | 35.4 | ----- |
| Hip Fracture.....                          | 20              | 10.0                | 7.7  | ----- | 20.0    | 14.0 | ----- | 30.0     | 18.5 | ----- |
| Sepsis.....                                | 10              | 40.0                | 25.5 | ----- | 50.0    | 34.1 | ----- | 70.0     | 39.2 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 2               | 0.0                 | 17.6 | ----- | 0.0     | 22.9 | ----- | 0.0      | 26.3 | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 6               | 0.0                 | 7.3  | ----- | 0.0     | 13.7 | ----- | 33.3     | 18.5 | ----- |
| Open Reduction of Hip Fracture.....        | 10              | 10.0                | 7.1  | ----- | 30.0    | 13.4 | ----- | 30.0     | 18.2 | ----- |
| Prostatectomy.....                         | 53              | 0.0                 | 0.6  | 1.2   | 0.0     | 1.6  | 2.2   | 1.9      | 2.8  | 2.5   |
| Cholecystectomy.....                       | 8               | 0.0                 | 1.6  | ----- | 0.0     | 2.4  | ----- | 0.0      | 3.0  | ----- |
| Hysterectomy.....                          | 4               | 0.0                 | 1.8  | ----- | 0.0     | 3.0  | ----- | 0.0      | 4.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# HUBBARD REGIONAL HOSPITAL

Medicare Provider Number: 220025

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.6 years  
Proportion female..... 58.3 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 25.0 %  
Transferred from skilled nursing facility..... 13.7 %  
Admitted for elective procedure..... 28.5 %  
Admitted for emergency..... 27.3 %

### COMORBIDITIES:

Cancer..... 6.9 %  
Chronic cardiovascular disease..... 29.2 %  
Chronic liver disease..... 0.4 %  
Chronic renal disease..... 2.5 %  
Chronic pulmonary disease..... 8.7 %  
Cerebrovascular degeneration..... 7.9 %  
Diabetes mellitus..... 7.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 92.5%  
State ..... 0.2%  
Outside State ..... 7.3%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.3 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 58  
Occupancy Rate ..... 70.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 63.0 %  
Case Mix Index (CMI) ..... 1.0603

### STAFFING:

Total Number of Physicians..... 29  
Percent of Physicians Board  
Certified Specialists ..... 72.4 %  
Medical Residents/Interns ..... 0  
Registered Nurses ..... 66  
Licensed Practical Nurses ..... 22

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# J B THOMAS HOSPITAL

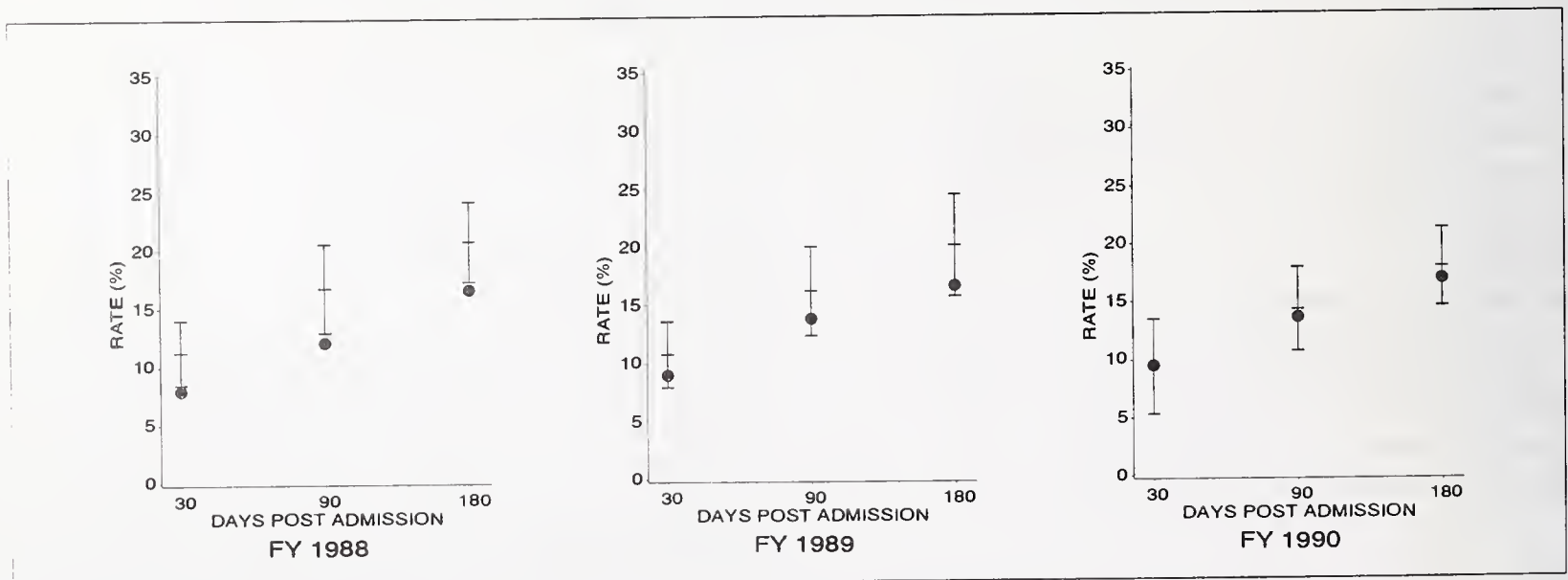
15 KING ST  
PEABODY, MA 01960  
Medicare Provider Number: 220114

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 759                | 9.5                 | 9.4  | 2.0   | 13.6    | 14.3 | 1.8   | 16.9     | 17.9 | 1.7   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 21                 | 14.3                | 32.4 | ----- | 23.8    | 35.4 | ----- | 23.8     | 38.2 | ----- |
| Congestive Heart Failure.....              | 48                 | 18.7                | 16.1 | ----- | 20.8    | 25.4 | ----- | 27.1     | 31.8 | ----- |
| Pneumonia/Influenza.....                   | 30                 | 26.7                | 16.9 | ----- | 26.7    | 23.1 | ----- | 26.7     | 26.9 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 5                  | 40.0                | 8.2  | ----- | 40.0    | 14.0 | ----- | 40.0     | 18.8 | ----- |
| Transient Cerebral Ischemia.....           | 15                 | 0.0                 | 1.5  | ----- | 0.0     | 3.5  | ----- | 0.0      | 6.1  | ----- |
| Stroke.....                                | 30                 | 20.0                | 20.9 | ----- | 36.7    | 28.2 | ----- | 43.3     | 32.2 | ----- |
| Hip Fracture.....                          | 21                 | 0.0                 | 7.4  | ----- | 4.8     | 12.9 | ----- | 4.8      | 16.7 | ----- |
| Sepsis.....                                | 3                  | 0.0                 | 8.6  | ----- | 0.0     | 11.8 | ----- | 0.0      | 13.6 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 1                  | 0.0                 | 9.5  | ----- | 100.0   | 21.4 | ----- | 100.0    | 32.9 | ----- |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 6                  | 0.0                 | 4.9  | ----- | 0.0     | 8.7  | ----- | 0.0      | 11.9 | ----- |
| Open Reduction of Hip Fracture.....        | 15                 | 0.0                 | 7.0  | ----- | 6.7     | 12.5 | ----- | 6.7      | 16.3 | ----- |
| Prostatectomy.....                         | 6                  | 0.0                 | 0.5  | ----- | 0.0     | 1.2  | ----- | 0.0      | 2.3  | ----- |
| Cholecystectomy.....                       | 12                 | 0.0                 | 4.8  | ----- | 0.0     | 7.6  | ----- | 0.0      | 9.0  | ----- |
| Hysterectomy.....                          | 0                  |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





**J B THOMAS HOSPITAL**  
Medicare Provider Number: 220114

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 76.8 years  
Proportion female..... 64.3 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 31.0 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 22.0 %  
Admitted for emergency..... 61.8 %

**COMORBIDITIES:**

Cancer..... 7.1 %  
Chronic cardiovascular disease..... 37.2 %  
Chronic liver disease..... 1.6 %  
Chronic renal disease..... 3.8 %  
Chronic pulmonary disease..... 17.5 %  
Cerebrovascular degeneration..... 4.2 %  
Diabetes mellitus..... 7.5 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 94.1%  
State ..... 4.0%  
Outside State ..... 1.9%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 9.6 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 76  
Occupancy Rate ..... 55.0 %  
Ownership/Control..... Local Government  
Medicare Discharges ..... 58.1 %  
Case Mix Index (CMI) ..... 1.0683

**STAFFING:**

Total Number of Physicians..... 32  
Percent of Physicians Board  
Certified Specialists .....(Not Available)  
Medical Residents/Interns ..... 0  
Registered Nurses..... 65  
Licensed Practical Nurses ..... 16

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# JORDAN HOSPITAL INC

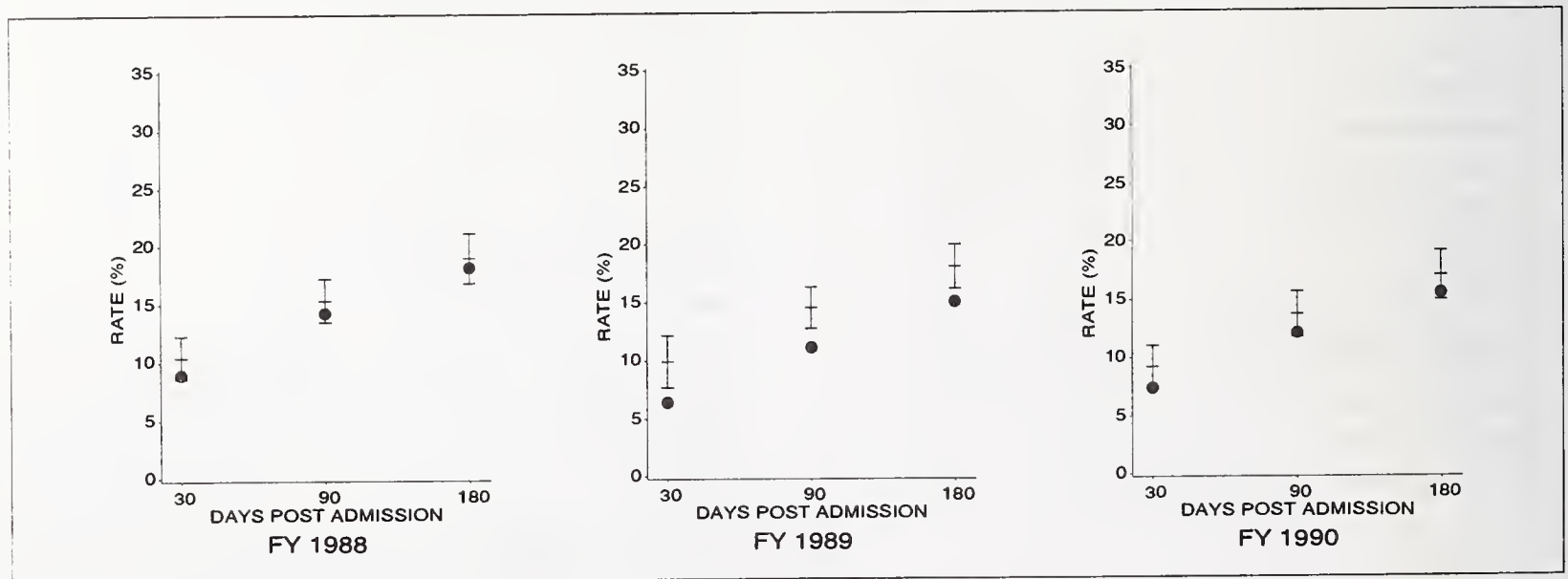
SANDWICH RD  
PLYMOUTH, MA 02360  
Medicare Provider Number: 220060

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 2019            | 7.4                 | 9.2  | 0.9  | 12.1    | 13.7 | 1.0  | 15.5     | 17.0 | 1.0  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 73              | 20.5                | 30.1 | 7.6  | 24.7    | 33.7 | 7.1  | 30.1     | 36.5 | 6.5  |
| Congestive Heart Failure.....              | 99              | 21.2                | 17.2 | 6.1  | 33.3    | 27.0 | 7.0  | 38.4     | 33.5 | 7.4  |
| Pneumonia/Influenza.....                   | 98              | 7.1                 | 16.0 | 5.2  | 12.2    | 21.5 | 6.1  | 14.3     | 25.1 | 6.2  |
| Chronic Obstructive Pulmonary Disease..... | 30              | 3.3                 | 6.1  | ---- | 3.3     | 10.4 | ---- | 6.7      | 13.8 | ---- |
| Transient Cerebral Ischemia.....           | 27              | 7.4                 | 1.7  | ---- | 14.8    | 3.8  | ---- | 22.2     | 6.1  | ---- |
| Stroke.....                                | 56              | 16.1                | 22.0 | 7.3  | 25.0    | 28.0 | 6.5  | 28.6     | 31.4 | 8.1  |
| Hip Fracture.....                          | 58              | 5.2                 | 7.8  | 3.7  | 8.6     | 13.9 | 6.1  | 8.6      | 17.9 | 6.6  |
| Sepsis.....                                | 19              | 21.1                | 23.5 | ---- | 26.3    | 29.8 | ---- | 36.8     | 34.4 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 10              | 0.0                 | 2.7  | ---- | 0.0     | 5.6  | ---- | 10.0     | 8.4  | ---- |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 26              | 3.8                 | 5.2  | ---- | 7.7     | 9.6  | ---- | 7.7      | 12.7 | ---- |
| Open Reduction of Hip Fracture.....        | 32              | 3.1                 | 7.6  | ---- | 9.4     | 13.9 | ---- | 9.4      | 18.2 | ---- |
| Prostatectomy.....                         | 80              | 1.2                 | 0.7  | 1.3  | 1.2     | 1.4  | 1.7  | 1.2      | 2.4  | 2.4  |
| Cholecystectomy.....                       | 29              | 0.0                 | 2.3  | ---- | 3.4     | 4.4  | ---- | 3.4      | 6.0  | ---- |
| Hysterectomy.....                          | 11              | 0.0                 | 0.1  | ---- | 0.0     | 0.2  | ---- | 0.0      | 0.4  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



**JORDAN HOSPITAL INC**  
Medicare Provider Number: 220060

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 75.4 years  
Proportion female..... 58.2 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 28.0 %  
Transferred from skilled nursing facility..... 0.3 %  
Admitted for elective procedure..... 17.2 %  
Admitted for emergency..... 77.8 %

**COMORBIDITIES:**

Cancer..... 5.6 %  
Chronic cardiovascular disease..... 41.9 %  
Chronic liver disease..... 1.0 %  
Chronic renal disease..... 3.7 %  
Chronic pulmonary disease..... 16.2 %  
Cerebrovascular degeneration..... 4.9 %  
Diabetes mellitus..... 6.1 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City..... 87.8%  
State ..... 9.5%  
Outside State ..... 2.7%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 8.2 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 150  
Occupancy Rate ..... 73.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 40.9 %  
Case Mix Index (CMI) ..... 1.0842

**STAFFING:**

Total Number of Physicians..... 89  
Percent of Physicians Board  
Certified Specialists ..... 85.4 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 153  
Licensed Practical Nurses ..... 27

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# L F QUIGLEY MEM HOSPITAL SOLDIERS HOME

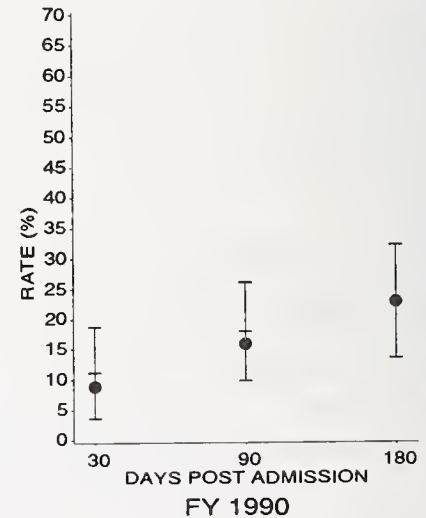
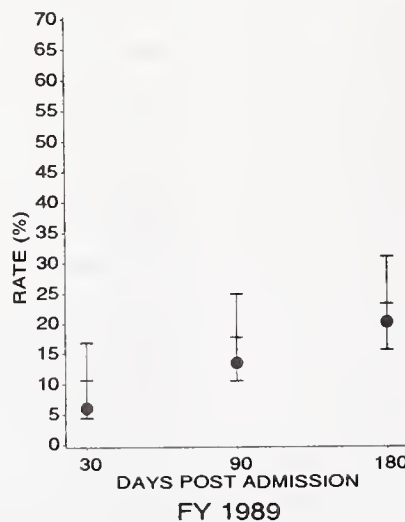
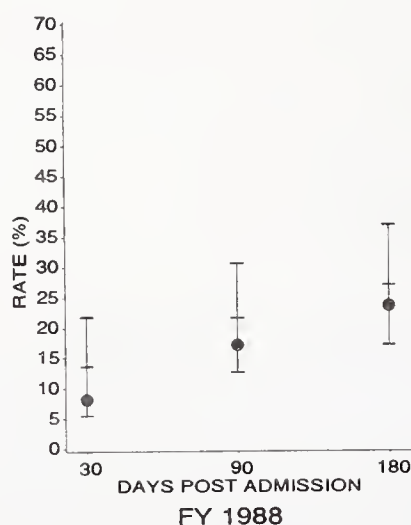
100 SUMMIT AVE  
CHELSEA, MA 02150  
Medicare Provider Number: 220154

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 114                | 8.8                 | 11.1 | 3.8   | 15.8    | 17.9 | 4.1   | 22.8     | 22.8 | 4.7   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 1                  | 100.0               | 40.8 | ----- | 100.0   | 47.8 | ----- | 100.0    | 53.8 | ----- |
| Congestive Heart Failure.....              | 6                  | 16.7                | 15.0 | ----- | 33.3    | 23.0 | ----- | 50.0     | 28.1 | ----- |
| Pneumonia/Influenza.....                   | 15                 | 6.7                 | 18.3 | ----- | 26.7    | 25.8 | ----- | 33.3     | 31.5 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 8                  | 0.0                 | 5.6  | ----- | 0.0     | 10.5 | ----- | 12.5     | 14.4 | ----- |
| Transient Cerebral Ischemia.....           | 1                  | 0.0                 | 1.0  | ----- | 0.0     | 2.0  | ----- | 100.0    | 3.3  | ----- |
| Stroke.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Fracture.....                          | 0                  |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0                  |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 0                  |                     |      |       |         |      |       |          |      |       |
| Hysterectomy.....                          | 0                  |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# L F QUIGLEY MEM HOSPITAL SOLDIERS HOME

Medicare Provider Number: 220154

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.9 years  
Proportion female..... 3.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 0.9 %  
Transferred from skilled nursing facility..... 25.4 %  
Admitted for elective procedure..... 6.1 %  
Admitted for emergency..... 0.0 %

### COMORBIDITIES:

Cancer..... 4.4 %  
Chronic cardiovascular disease..... 27.2 %  
Chronic liver disease..... 0.0 %  
Chronic renal disease..... 0.9 %  
Chronic pulmonary disease..... 33.3 %  
Cerebrovascular degeneration..... 15.8 %  
Diabetes mellitus..... 3.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 67.7%  
State ..... 30.5%  
Outside State ..... 1.8%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.8 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1988

### PROFILE:

Total Beds ..... 84  
Ownership/Control..... State Government  
Case Mix Index (CMI) ..... 0.8998

### STAFFING:

Medical Residents/Interns ..... 14  
Registered Nurses..... 64  
Licensed Practical Nurses..... 35

### SPECIALTY SERVICES:

Burn Unit ..... No  
Coronary Care Unit ..... No  
Hospice Care ..... No  
Intensive Care Unit ..... No  
Organ Transplant ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# LAWRENCE GENERAL HOSPITAL

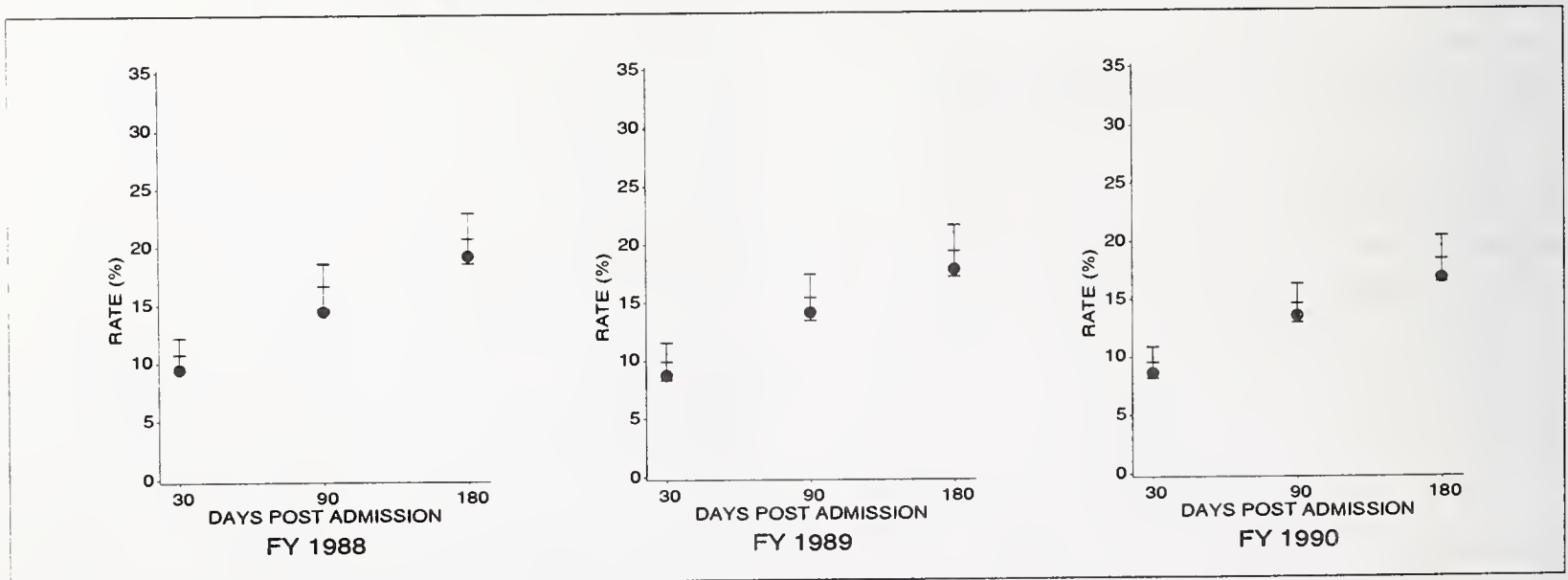
ONE GENERAL STREET  
LAWRENCE, MA 01842  
Medicare Provider Number: 220010

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2513            | 8.6                 | 9.5  | 0.7   | 13.5    | 14.6 | 0.9   | 16.8     | 18.4 | 1.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 93              | 37.6                | 27.0 | 7.1   | 44.1    | 31.1 | 7.6   | 46.2     | 34.2 | 7.5   |
| Congestive Heart Failure.....              | 174             | 10.3                | 15.9 | 4.2   | 20.1    | 25.4 | 4.9   | 25.3     | 31.7 | 5.3   |
| Pneumonia/Influenza.....                   | 160             | 16.2                | 17.1 | 3.8   | 20.0    | 24.1 | 5.0   | 24.4     | 28.8 | 5.3   |
| Chronic Obstructive Pulmonary Disease..... | 3               | 0.0                 | 6.0  | ----- | 0.0     | 11.2 | ----- | 0.0      | 16.0 | ----- |
| Transient Cerebral Ischemia.....           | 69              | 0.0                 | 2.1  | 2.6   | 2.9     | 4.5  | 2.9   | 5.8      | 7.1  | 3.3   |
| Stroke.....                                | 93              | 19.4                | 20.6 | 4.3   | 22.6    | 28.7 | 5.8   | 25.8     | 33.3 | 6.6   |
| Hip Fracture.....                          | 65              | 3.1                 | 6.8  | 4.3   | 7.7     | 12.4 | 6.7   | 7.7      | 16.3 | 8.0   |
| Sepsis.....                                | 14              | 7.1                 | 17.2 | ----- | 7.1     | 24.3 | ----- | 14.3     | 28.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 20              | 0.0                 | 4.0  | ----- | 10.0    | 7.6  | ----- | 10.0     | 10.6 | ----- |
| Carotid Endarterectomy.....                | 8               | 0.0                 | 1.6  | ----- | 12.5    | 2.8  | ----- | 12.5     | 4.0  | ----- |
| Hip Replacement/Reconstruction.....        | 51              | 2.0                 | 3.3  | 3.0   | 3.9     | 6.2  | 5.2   | 5.9      | 8.4  | 6.1   |
| Open Reduction of Hip Fracture.....        | 35              | 2.9                 | 6.4  | ----- | 5.7     | 11.7 | ----- | 5.7      | 15.4 | ----- |
| Prostatectomy.....                         | 47              | 0.0                 | 1.2  | ----- | 4.3     | 2.3  | ----- | 4.3      | 3.7  | ----- |
| Cholecystectomy.....                       | 39              | 0.0                 | 2.8  | ----- | 5.1     | 4.4  | ----- | 7.7      | 5.7  | ----- |
| Hysterectomy.....                          | 9               | 0.0                 | 0.1  | ----- | 0.0     | 0.3  | ----- | 0.0      | 0.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# LAWRENCE GENERAL HOSPITAL

Medicare Provider Number: 220010

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.2 years  
Proportion female..... 60.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 28.6 %  
Transferred from skilled nursing facility..... 8.4 %  
Admitted for elective procedure..... 14.8 %  
Admitted for emergency..... 22.2 %

### COMORBIDITIES:

Cancer..... 6.0 %  
Chronic cardiovascular disease..... 34.8 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 5.3 %  
Chronic pulmonary disease..... 20.2 %  
Cerebrovascular degeneration..... 6.9 %  
Diabetes mellitus..... 10.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 89.3%  
State ..... 3.8%  
Outside State ..... 6.9%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.8 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 312  
Occupancy Rate ..... 66.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 32.6 %  
Case Mix Index (CMI) ..... 1.1631

### STAFFING:

Total Number of Physicians..... 251  
Percent of Physicians Board  
Certified Specialists..... 66.5 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 232  
Licensed Practical Nurses ..... 56

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# LAWRENCE MEMORIAL HOSPITAL OF MEDFORD

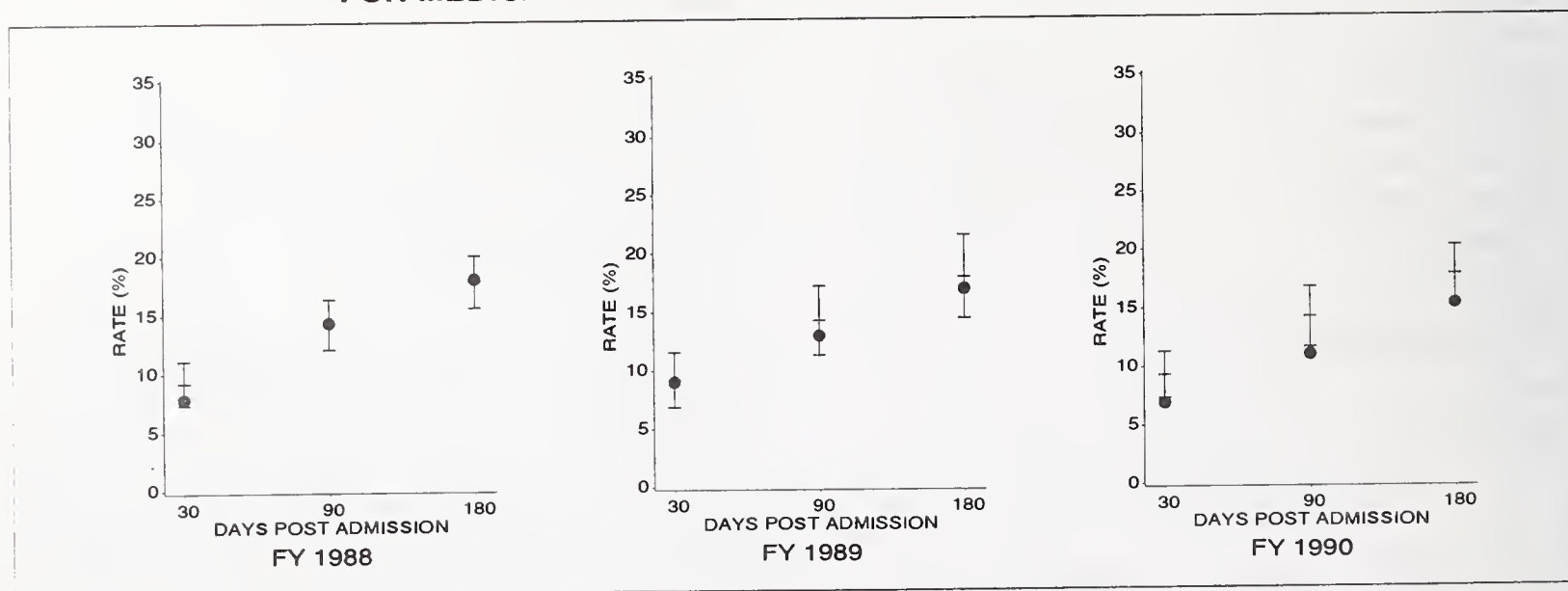
170 GOVERNORS AVE  
MEDFORD, MA 02155  
Medicare Provider Number: 220070

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1483            | 6.9                 | 9.3  | 1.0   | 11.0    | 14.2 | 1.3   | 15.3     | 17.8 | 1.2   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 59              | 30.5                | 28.3 | 6.2   | 37.3    | 32.2 | 7.4   | 37.3     | 35.4 | 6.5   |
| Congestive Heart Failure.....              | 85              | 9.4                 | 15.0 | 6.2   | 18.8    | 23.3 | 6.2   | 24.7     | 29.4 | 6.7   |
| Pneumonia/Influenza.....                   | 95              | 11.6                | 17.4 | 4.7   | 14.7    | 24.0 | 6.1   | 21.1     | 28.0 | 7.4   |
| Chronic Obstructive Pulmonary Disease..... | 15              | 6.7                 | 5.9  | ----- | 6.7     | 10.9 | ----- | 20.0     | 15.0 | ----- |
| Transient Cerebral Ischemia.....           | 15              | 0.0                 | 2.3  | ----- | 0.0     | 5.1  | ----- | 6.7      | 8.1  | ----- |
| Stroke.....                                | 52              | 11.5                | 19.3 | 9.6   | 19.2    | 26.2 | 10.4  | 26.9     | 30.1 | 10.0  |
| Hip Fracture.....                          | 47              | 4.3                 | 7.6  | ----- | 8.5     | 13.5 | ----- | 8.5      | 17.5 | ----- |
| Sepsis.....                                | 14              | 14.3                | 19.3 | ----- | 21.4    | 27.6 | ----- | 35.7     | 32.6 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 12              | 0.0                 | 2.0  | ----- | 0.0     | 4.1  | ----- | 0.0      | 6.3  | ----- |
| Carotid Endarterectomy.....                | 3               | 0.0                 | 1.7  | ----- | 0.0     | 3.0  | ----- | 0.0      | 4.1  | ----- |
| Hip Replacement/Reconstruction.....        | 17              | 0.0                 | 7.2  | ----- | 5.9     | 12.7 | ----- | 5.9      | 16.2 | ----- |
| Open Reduction of Hip Fracture.....        | 24              | 8.3                 | 5.7  | ----- | 12.5    | 10.4 | ----- | 12.5     | 13.8 | ----- |
| Prostatectomy.....                         | 26              | 3.8                 | 1.1  | ----- | 3.8     | 2.5  | ----- | 7.7      | 4.2  | ----- |
| Cholecystectomy.....                       | 23              | 4.3                 | 2.8  | ----- | 4.3     | 5.8  | ----- | 4.3      | 8.4  | ----- |
| Hysterectomy.....                          | 5               | 0.0                 | 0.7  | ----- | 0.0     | 1.7  | ----- | 0.0      | 2.9  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# LAWRENCE MEMORIAL HOSPITAL OF MEDFORD

Medicare Provider Number: 220070

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 76.8 years |
| Proportion female.....        | 63.7 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 40.3 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 13.8 % |
| Admitted for emergency.....                    | 57.9 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 6.9 %  |
| Chronic cardiovascular disease..... | 39.9 % |
| Chronic liver disease.....          | 1.3 %  |
| Chronic renal disease.....          | 2.4 %  |
| Chronic pulmonary disease.....      | 14.8 % |
| Cerebrovascular degeneration.....   | 8.3 %  |
| Diabetes mellitus.....              | 7.1 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 87.8%  |
| State .....         | 10.6%  |
| Outside State ..... | 1.6%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |           |
|----------------|-----------|
| Hospital ..... | 11.1 Days |
| State .....    | 10.1 Days |
| National ..... | 8.6 Days  |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 150                 |
| Occupancy Rate .....       | 63.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 59.4 %              |
| Case Mix Index (CMI) ..... | 1.1619              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 103    |
| Percent of Physicians Board<br>Certified Specialists ..... | 87.4 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 162    |
| Licensed Practical Nurses .....                            | 10     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | Yes |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates



# LEOMINSTER HOSPITAL

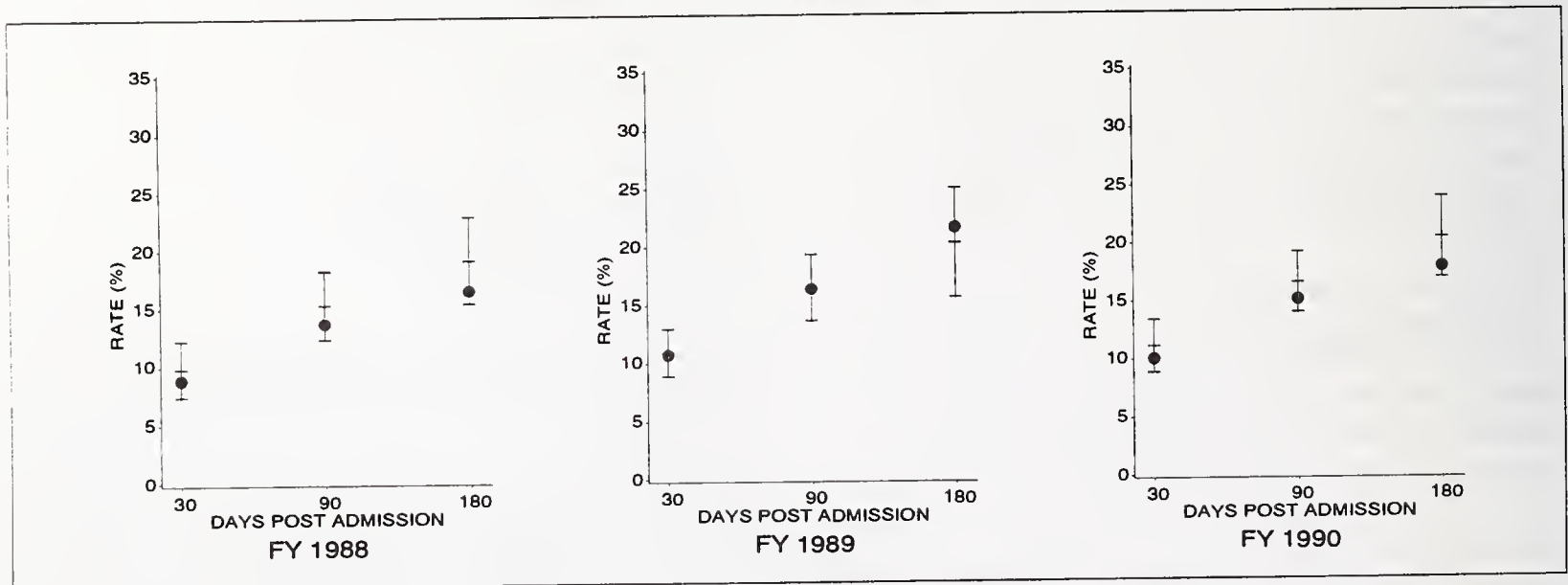
HOSPITAL RD  
LEOMINSTER, MA 01453  
Medicare Provider Number: 220094

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1034            | 10.0                | 11.1 | 1.1   | 15.1    | 16.6 | 1.3   | 17.9     | 20.4 | 1.7   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 49              | 22.4                | 26.5 | ----- | 30.6    | 29.3 | ----- | 30.6     | 31.7 | ----- |
| Congestive Heart Failure.....              | 68              | 8.8                 | 15.7 | 5.7   | 25.0    | 25.1 | 6.7   | 29.4     | 31.9 | 5.8   |
| Pneumonia/Influenza.....                   | 78              | 21.8                | 20.3 | 5.7   | 26.9    | 27.3 | 6.5   | 28.2     | 31.6 | 7.0   |
| Chronic Obstructive Pulmonary Disease..... | 9               | 11.1                | 6.8  | ----- | 33.3    | 12.5 | ----- | 33.3     | 17.8 | ----- |
| Transient Cerebral Ischemia.....           | 23              | 0.0                 | 1.6  | ----- | 0.0     | 3.6  | ----- | 0.0      | 5.8  | ----- |
| Stroke.....                                | 25              | 36.0                | 23.7 | ----- | 40.0    | 32.1 | ----- | 40.0     | 36.3 | ----- |
| Hip Fracture.....                          | 17              | 0.0                 | 6.7  | ----- | 5.9     | 12.0 | ----- | 5.9      | 15.6 | ----- |
| Sepsis.....                                | 16              | 12.5                | 27.8 | ----- | 18.8    | 33.8 | ----- | 31.3     | 38.1 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 14              | 0.0                 | 4.5  | ----- | 0.0     | 9.1  | ----- | 7.1      | 13.7 | ----- |
| Carotid Endarterectomy.....                | 4               | 0.0                 | 2.2  | ----- | 0.0     | 3.7  | ----- | 0.0      | 5.5  | ----- |
| Hip Replacement/Reconstruction.....        | 10              | 10.0                | 4.1  | ----- | 10.0    | 7.9  | ----- | 10.0     | 10.5 | ----- |
| Open Reduction of Hip Fracture.....        | 14              | 0.0                 | 6.3  | ----- | 7.1     | 11.6 | ----- | 7.1      | 15.2 | ----- |
| Prostatectomy.....                         | 22              | 0.0                 | 0.5  | ----- | 0.0     | 1.2  | ----- | 0.0      | 2.1  | ----- |
| Cholecystectomy.....                       | 19              | 0.0                 | 3.1  | ----- | 0.0     | 5.4  | ----- | 0.0      | 6.9  | ----- |
| Hysterectomy.....                          | 9               | 0.0                 | 0.7  | ----- | 0.0     | 1.5  | ----- | 0.0      | 2.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



**LEOMINSTER HOSPITAL**  
Medicare Provider Number: 220094

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 76.4 years  
Proportion female..... 61.1 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 23.1 %  
Transferred from skilled nursing facility..... 0.6 %  
Admitted for elective procedure..... 14.5 %  
Admitted for emergency..... 67.1 %

**COMORBIDITIES:**

Cancer..... 7.7 %  
Chronic cardiovascular disease..... 40.6 %  
Chronic liver disease..... 1.4 %  
Chronic renal disease..... 3.8 %  
Chronic pulmonary disease..... 15.2 %  
Cerebrovascular degeneration..... 7.2 %  
Diabetes mellitus..... 6.0 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 93.8%  
State ..... 4.0%  
Outside State ..... 2.2%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 8.5 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 120  
Occupancy Rate ..... 69.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 29.0 %  
Case Mix Index (CMI) ..... 1.1703

**STAFFING:**

Total Number of Physicians..... 93  
Percent of Physicians Board  
Certified Specialists..... 67.7 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 108  
Licensed Practical Nurses ..... 15

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# LEONARD MORSE HOSPITAL

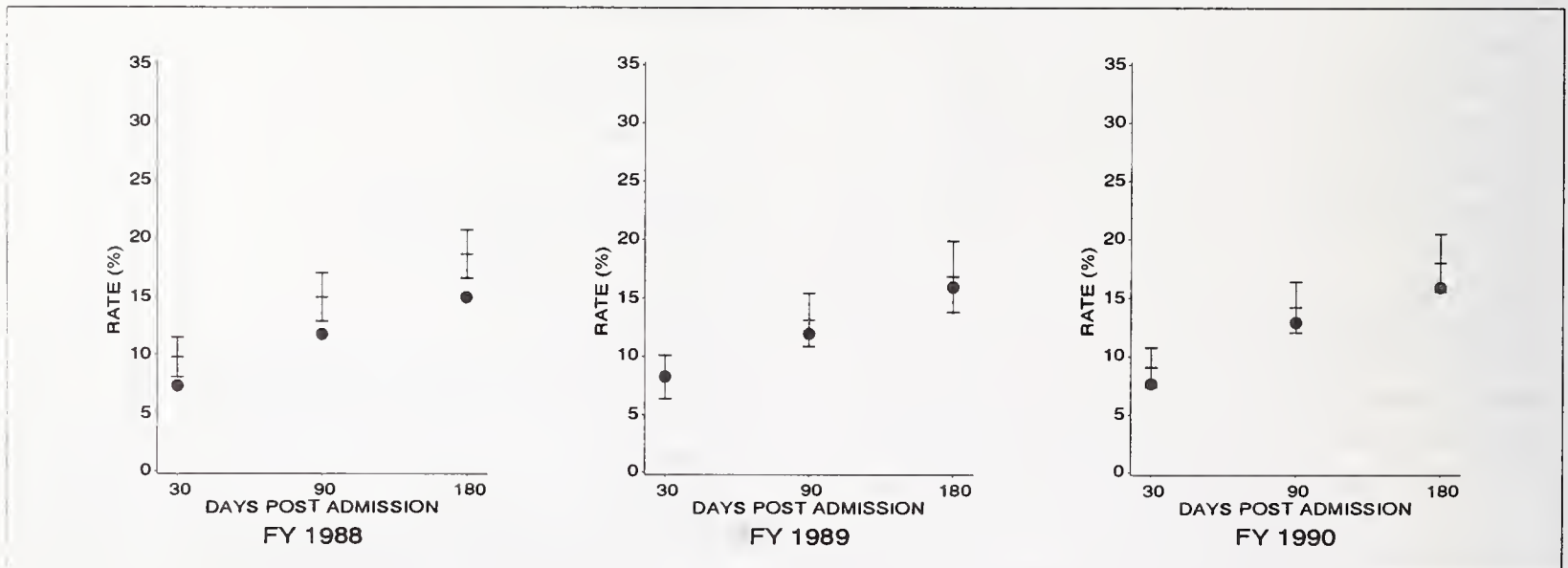
67 UNION ST  
NATICK, MA 01760  
Medicare Provider Number: 220048

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1674               | 7.6                 | 9.0  | 0.9   | 12.9    | 14.2 | 1.1   | 15.9     | 18.0 | 1.2   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 60                 | 16.7                | 25.5 | 10.4  | 25.0    | 29.1 | 8.4   | 26.7     | 32.0 | 8.1   |
| Congestive Heart Failure.....              | 78                 | 16.7                | 14.6 | 4.8   | 23.1    | 22.7 | 5.0   | 26.9     | 28.7 | 5.2   |
| Pneumonia/Influenza.....                   | 86                 | 12.8                | 17.4 | 6.3   | 18.6    | 23.5 | 7.2   | 22.1     | 27.5 | 7.4   |
| Chronic Obstructive Pulmonary Disease..... | 22                 | 18.2                | 7.9  | ----- | 22.7    | 13.4 | ----- | 27.3     | 17.8 | ----- |
| Transient Cerebral Ischemia.....           | 35                 | 0.0                 | 2.1  | ----- | 0.0     | 4.9  | ----- | 2.9      | 8.1  | ----- |
| Stroke.....                                | 52                 | 17.3                | 18.7 | 5.6   | 25.0    | 25.7 | 7.6   | 30.8     | 29.5 | 8.0   |
| Hip Fracture.....                          | 36                 | 0.0                 | 8.4  | ----- | 2.8     | 14.7 | ----- | 5.6      | 18.6 | ----- |
| Sepsis.....                                | 18                 | 27.8                | 22.1 | ----- | 38.9    | 30.7 | ----- | 44.4     | 36.1 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 6                  | 0.0                 | 5.8  | ----- | 0.0     | 11.1 | ----- | 0.0      | 14.7 | ----- |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 25                 | 0.0                 | 7.7  | ----- | 0.0     | 13.5 | ----- | 4.0      | 17.0 | ----- |
| Open Reduction of Hip Fracture.....        | 16                 | 0.0                 | 6.5  | ----- | 6.3     | 11.3 | ----- | 6.3      | 14.6 | ----- |
| Prostatectomy.....                         | 51                 | 3.9                 | 1.1  | 2.8   | 3.9     | 2.3  | 2.6   | 3.9      | 3.7  | 2.8   |
| Cholecystectomy.....                       | 16                 | 0.0                 | 1.2  | ----- | 0.0     | 2.3  | ----- | 0.0      | 3.3  | ----- |
| Hysterectomy.....                          | 8                  | 0.0                 | 1.0  | ----- | 0.0     | 2.8  | ----- | 0.0      | 5.0  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# LEONARD MORSE HOSPITAL

Medicare Provider Number: 220048

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.7 years  
Proportion female..... 62.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 38.8 %  
Transferred from skilled nursing facility..... 4.2 %  
Admitted for elective procedure..... 13.6 %  
Admitted for emergency..... 78.4 %

### COMORBIDITIES:

Cancer..... 8.5 %  
Chronic cardiovascular disease..... 36.9 %  
Chronic liver disease..... 1.6 %  
Chronic renal disease..... 3.3 %  
Chronic pulmonary disease..... 15.9 %  
Cerebrovascular degeneration..... 3.5 %  
Diabetes mellitus..... 6.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 64.2%  
State ..... 32.7%  
Outside State ..... 3.1%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.4 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 209  
Occupancy Rate ..... 67.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 36.2 %  
Case Mix Index (CMI) ..... 1.1717

### STAFFING:

Total Number of Physicians..... 93  
Percent of Physicians Board  
Certified Specialists ..... 89.2 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 180  
Licensed Practical Nurses ..... 37

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# LOWELL GENERAL HOSPITAL

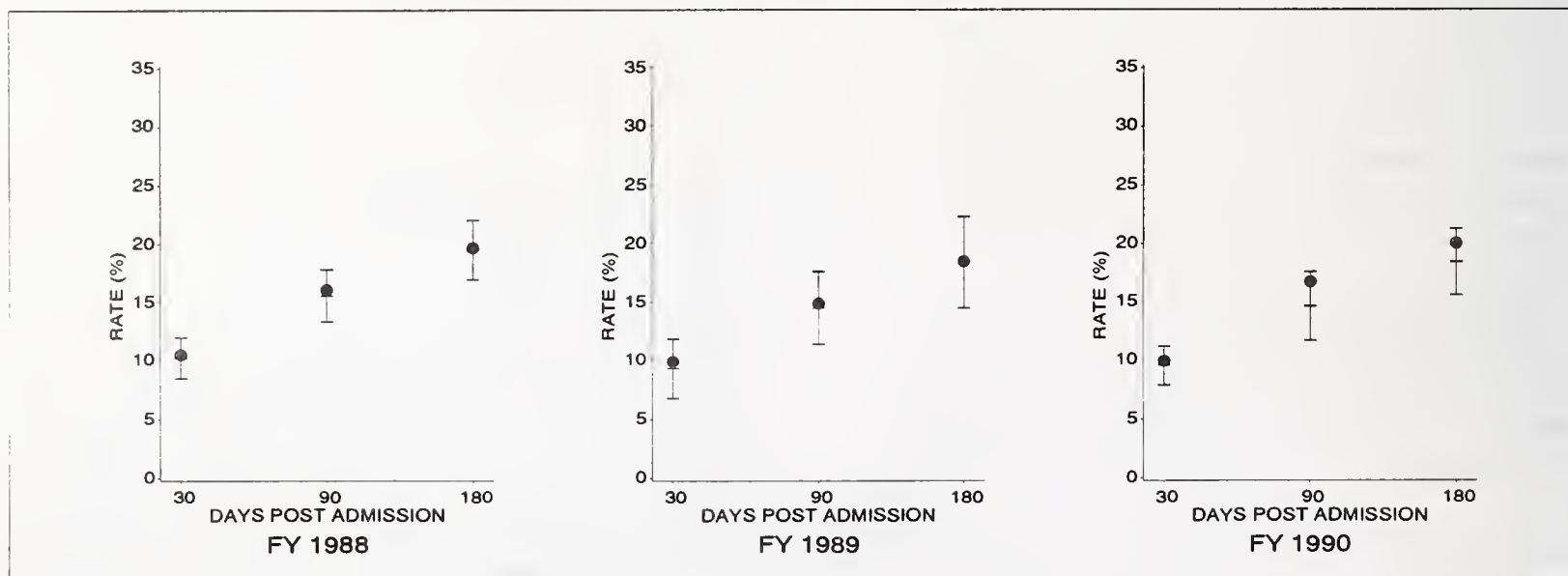
295 VARNUM AVENUE  
LOWELL, MA 01854  
Medicare Provider Number: 220063

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1384            | 9.9                 | 9.5  | 0.8   | 16.7    | 14.6 | 1.5   | 20.0     | 18.4 | 1.4   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 69              | 18.8                | 24.3 | 5.9   | 33.3    | 28.5 | 5.7   | 37.7     | 31.7 | 6.1   |
| Congestive Heart Failure.....              | 94              | 10.6                | 15.0 | 6.4   | 18.1    | 23.9 | 6.8   | 26.6     | 30.4 | 5.7   |
| Pneumonia/Influenza.....                   | 53              | 15.1                | 13.1 | 5.8   | 20.8    | 18.1 | 7.9   | 24.5     | 21.6 | 8.0   |
| Chronic Obstructive Pulmonary Disease..... | 13              | 0.0                 | 6.0  | ----- | 7.7     | 10.2 | ----- | 15.4     | 14.1 | ----- |
| Transient Cerebral Ischemia.....           | 20              | 10.0                | 2.1  | ----- | 15.0    | 4.8  | ----- | 15.0     | 7.8  | ----- |
| Stroke.....                                | 55              | 32.7                | 22.6 | 7.9   | 41.8    | 30.0 | 9.6   | 45.5     | 34.2 | 9.0   |
| Hip Fracture.....                          | 43              | 2.3                 | 6.4  | ----- | 4.7     | 11.7 | ----- | 7.0      | 15.6 | ----- |
| Sepsis.....                                | 7               | 42.9                | 31.3 | ----- | 57.1    | 39.4 | ----- | 57.1     | 43.9 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 9               | 0.0                 | 3.3  | ----- | 11.1    | 6.8  | ----- | 11.1     | 9.9  | ----- |
| Carotid Endarterectomy.....                | 7               | 0.0                 | 1.5  | ----- | 0.0     | 2.8  | ----- | 0.0      | 3.9  | ----- |
| Hip Replacement/Reconstruction.....        | 16              | 6.3                 | 3.8  | ----- | 6.3     | 7.6  | ----- | 6.3      | 10.8 | ----- |
| Open Reduction of Hip Fracture.....        | 26              | 3.8                 | 5.9  | ----- | 7.7     | 11.0 | ----- | 7.7      | 14.9 | ----- |
| Prostatectomy.....                         | 44              | 2.3                 | 1.0  | ----- | 4.5     | 2.4  | ----- | 4.5      | 4.2  | ----- |
| Cholecystectomy.....                       | 23              | 4.3                 | 2.2  | ----- | 4.3     | 4.0  | ----- | 4.3      | 5.3  | ----- |
| Hysterectomy.....                          | 14              | 0.0                 | 0.4  | ----- | 0.0     | 0.8  | ----- | 0.0      | 1.3  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# LOWELL GENERAL HOSPITAL

Medicare Provider Number: 220063

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.9 years  
Proportion female..... 59.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 33.1 %  
Transferred from skilled nursing facility..... 6.0 %  
Admitted for elective procedure..... 14.0 %  
Admitted for emergency..... 23.9 %

### COMORBIDITIES:

Cancer..... 8.2 %  
Chronic cardiovascular disease..... 31.9 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 2.3 %  
Chronic pulmonary disease..... 14.0 %  
Cerebrovascular degeneration..... 5.0 %  
Diabetes mellitus..... 7.1 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 91.0%  
State ..... 3.1%  
Outside State ..... 5.9%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 12.1 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 242  
Occupancy Rate ..... 71.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 22.5 %  
Case Mix Index (CMI) ..... 1.1374

### STAFFING:

Total Number of Physicians..... 171  
Percent of Physicians Board  
Certified Specialists ..... 71.9 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 182  
Licensed Practical Nurses ..... 51

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



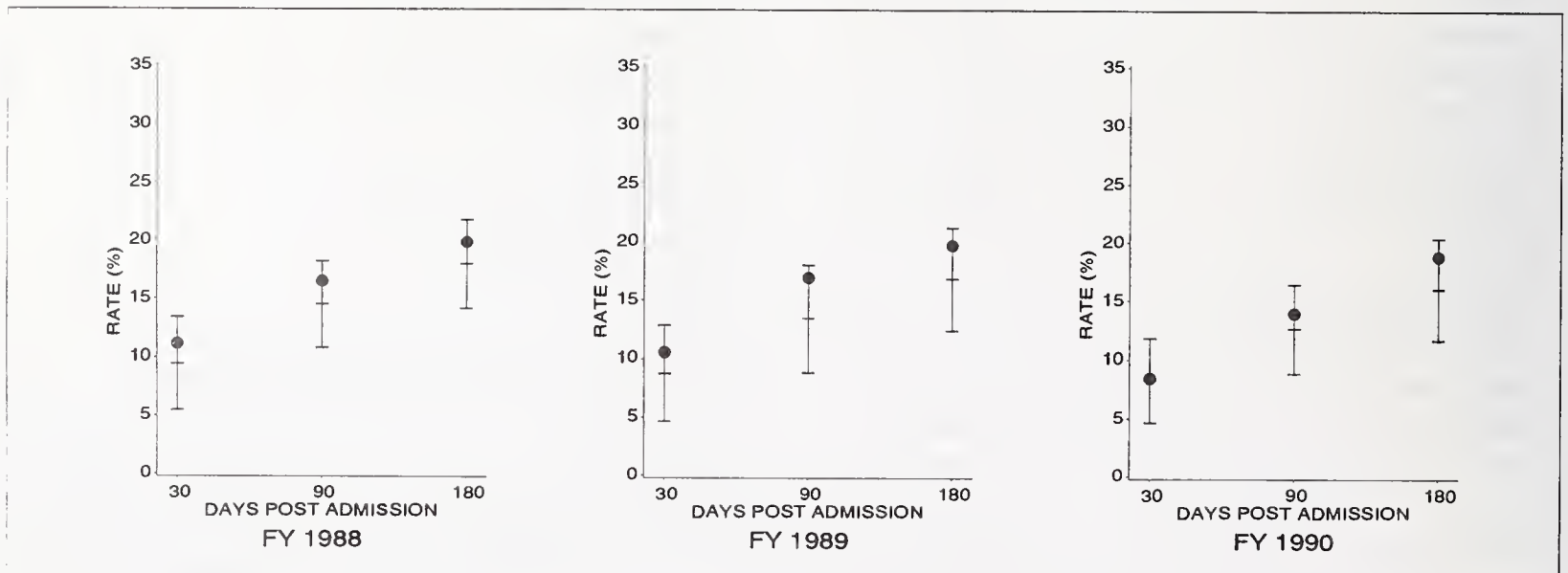
**LUDLOW HOSPITAL**  
14 CHESTNUT PLACE  
LUDLOW, MA 01056  
Medicare Provider Number: 220099

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 570                | 8.4                 | 8.2  | 1.8   | 13.9    | 12.6 | 1.9   | 18.8     | 16.0 | 2.2   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 27                 | 40.7                | 23.2 | ----- | 48.1    | 25.3 | ----- | 51.9     | 27.5 | ----- |
| Congestive Heart Failure.....              | 48                 | 18.8                | 12.5 | ----- | 27.1    | 19.6 | ----- | 31.3     | 25.2 | ----- |
| Pneumonia/Influenza.....                   | 39                 | 5.1                 | 12.3 | ----- | 10.3    | 16.8 | ----- | 17.9     | 20.1 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 5                  | 20.0                | 8.3  | ----- | 40.0    | 14.3 | ----- | 60.0     | 18.7 | ----- |
| Transient Cerebral Ischemia.....           | 14                 | 0.0                 | 1.2  | ----- | 0.0     | 2.9  | ----- | 7.1      | 5.0  | ----- |
| Stroke.....                                | 22                 | 13.6                | 16.3 | ----- | 27.3    | 21.7 | ----- | 31.8     | 25.1 | ----- |
| Hip Fracture.....                          | 20                 | 5.0                 | 5.8  | ----- | 5.0     | 10.6 | ----- | 10.0     | 13.8 | ----- |
| Sepsis.....                                | 6                  | 33.3                | 27.1 | ----- | 33.3    | 38.4 | ----- | 33.3     | 45.9 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 3                  | 66.7                | 10.8 | ----- | 66.7    | 14.9 | ----- | 66.7     | 17.2 | ----- |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 8                  | 0.0                 | 3.5  | ----- | 0.0     | 6.8  | ----- | 0.0      | 9.4  | ----- |
| Open Reduction of Hip Fracture.....        | 11                 | 9.1                 | 6.5  | ----- | 9.1     | 12.2 | ----- | 18.2     | 16.1 | ----- |
| Prostatectomy.....                         | 11                 | 0.0                 | 1.4  | ----- | 0.0     | 3.5  | ----- | 9.1      | 5.8  | ----- |
| Cholecystectomy.....                       | 15                 | 6.7                 | 2.0  | ----- | 6.7     | 3.9  | ----- | 6.7      | 5.3  | ----- |
| Hysterectomy.....                          | 0                  |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$  SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



**LUDLOW HOSPITAL**  
Medicare Provider Number: 220099

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 76.2 years  
Proportion female..... 58.8 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 96.0 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 1.6 %  
Admitted for emergency..... 74.4 %

**COMORBIDITIES:**

Cancer..... 6.8 %  
Chronic cardiovascular disease..... 29.1 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 1.1 %  
Chronic pulmonary disease..... 9.1 %  
Cerebrovascular degeneration..... 2.6 %  
Diabetes mellitus..... 4.6 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 94.5%  
State ..... 1.7%  
Outside State ..... 3.8%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 8.1 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 40  
Occupancy Rate ..... 65.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 58.4 %  
Case Mix Index (CMI) ..... 1.1167

**STAFFING:**

Total Number of Physicians..... 33  
Percent of Physicians Board  
Certified Specialists..... 57.6 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 37  
Licensed Practical Nurses..... 7

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MA OSTEO HOSPITAL & MEDICAL CENTER

222 SOUTH HUNTINGTON AVENUE

BOSTON, MA 02130

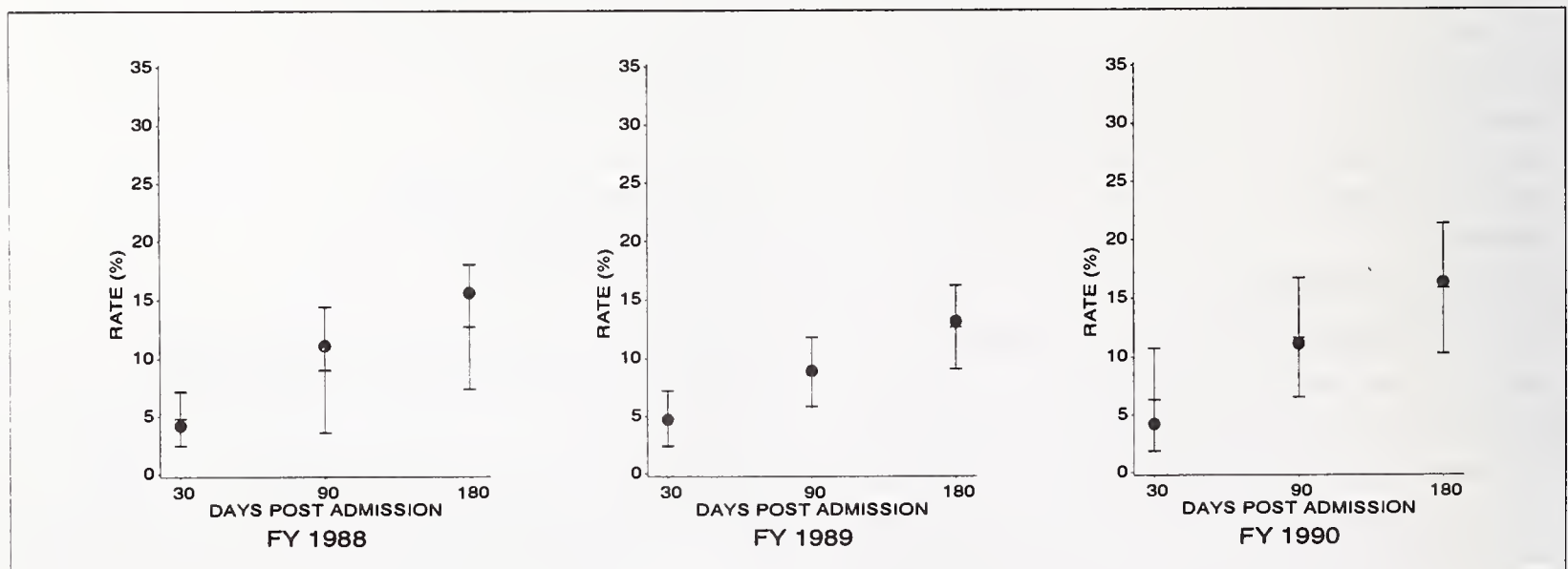
Medicare Provider Number: 220117

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 307             | 4.2                 | 6.3  | 2.2   | 11.1    | 11.6 | 2.5   | 16.3     | 15.8 | 2.8   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 1               | 0.0                 | 37.9 | ----- | 100.0   | 41.6 | ----- | 100.0    | 44.6 | ----- |
| Congestive Heart Failure.....              | 3               | 66.7                | 24.5 | ----- | 66.7    | 40.5 | ----- | 66.7     | 49.1 | ----- |
| Pneumonia/Influenza.....                   | 8               | 25.0                | 23.1 | ----- | 37.5    | 32.4 | ----- | 37.5     | 37.1 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 6               | 0.0                 | 8.6  | ----- | 0.0     | 16.4 | ----- | 0.0      | 21.7 | ----- |
| Transient Cerebral Ischemia.....           | 1               | 0.0                 | 0.8  | ----- | 0.0     | 1.7  | ----- | 0.0      | 2.8  | ----- |
| Stroke.....                                | 4               | 50.0                | 29.7 | ----- | 50.0    | 35.7 | ----- | 50.0     | 39.1 | ----- |
| Hip Fracture.....                          | 2               | 50.0                | 8.4  | ----- | 50.0    | 16.2 | ----- | 50.0     | 21.4 | ----- |
| Sepsis.....                                | 1               | 0.0                 | 53.8 | ----- | 100.0   | 77.9 | ----- | 100.0    | 85.4 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 2               | 50.0                | 7.7  | ----- | 50.0    | 15.4 | ----- | 50.0     | 20.8 | ----- |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 3               | 0.0                 | 1.2  | ----- | 33.3    | 2.4  | ----- | 33.3     | 3.9  | ----- |
| Cholecystectomy.....                       | 1               | 0.0                 | 4.4  | ----- | 0.0     | 8.7  | ----- | 0.0      | 11.2 | ----- |
| Hysterectomy.....                          | 0               |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# MA OSTEOPATHIC HOSPITAL & MEDICAL CENTER

Medicare Provider Number: 220117

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.8 years  
 Proportion female..... 65.1 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 62.9 %  
 Transferred from skilled nursing facility..... 16.9 %  
 Admitted for elective procedure..... 6.5 %  
 Admitted for emergency..... 89.3 %

### COMORBIDITIES:

Cancer..... 5.2 %  
 Chronic cardiovascular disease..... 33.6 %  
 Chronic liver disease..... 0.7 %  
 Chronic renal disease..... 3.3 %  
 Chronic pulmonary disease..... 13.0 %  
 Cerebrovascular degeneration..... 28.0 %  
 Diabetes mellitus..... 5.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 33.7%  
 State ..... 63.8%  
 Outside State ..... 2.5%  
 Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.0 Days  
 State ..... 10.1 Days  
 National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 52  
 Ownership/Control..... Private, Non-Profit  
 Case Mix Index (CMI) ..... 0.9729

### STAFFING:

Medical Residents/Interns ..... 3  
 Registered Nurses ..... 0  
 Licensed Practical Nurses ..... 0

### SPECIALTY SERVICES:

Burn Unit ..... No  
 Coronary Care Unit ..... No  
 Hospice Care ..... No  
 Intensive Care Unit ..... No  
 Organ Transplant ..... No  
 Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
 Rehabilitation..... No  
 Psychiatric ..... Yes  
 Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MARLBOROUGH HOSPITAL

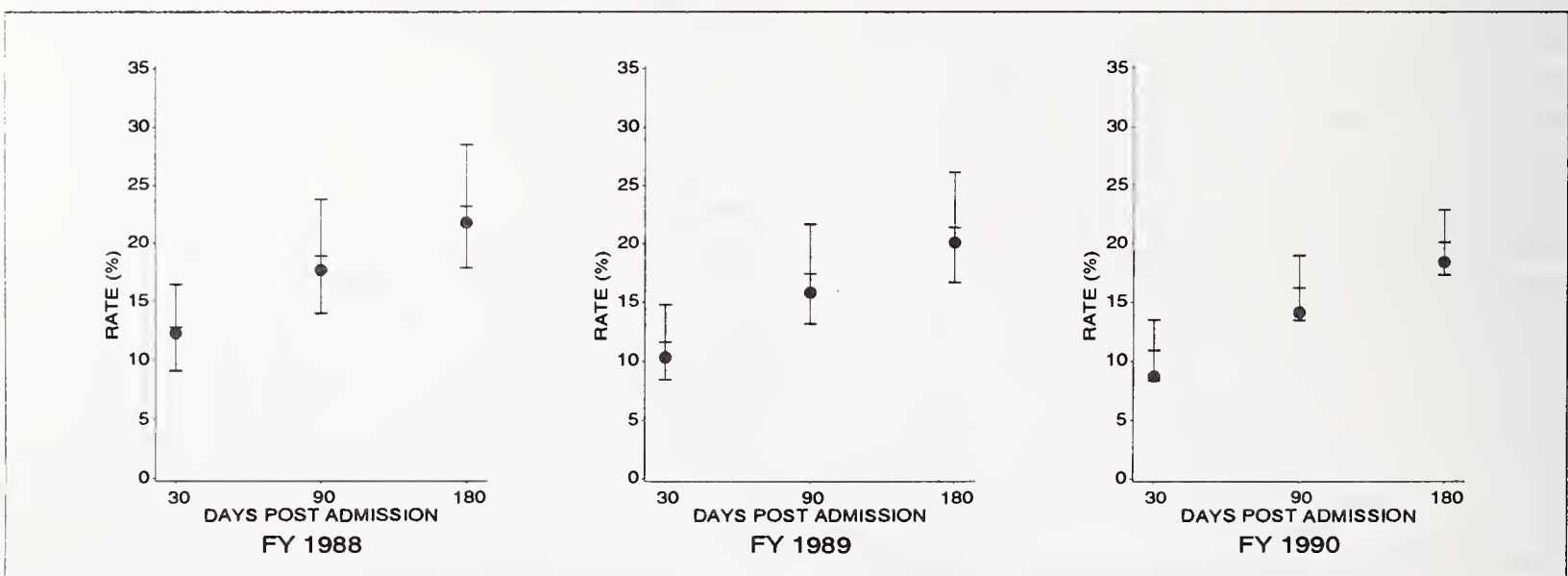
57 UNION ST  
MARLBOROUGH, MA 01752  
Medicare Provider Number: 220049

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1195               | 8.7                 | 10.9 | 1.3   | 14.1    | 16.2 | 1.4   | 18.4     | 20.1 | 1.4   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 62                 | 19.4                | 26.4 | 9.6   | 27.4    | 30.0 | 9.1   | 32.3     | 33.2 | 7.2   |
| Congestive Heart Failure.....              | 68                 | 17.6                | 15.3 | 6.8   | 19.1    | 24.1 | 8.7   | 29.4     | 30.2 | 9.8   |
| Pneumonia/Influenza.....                   | 76                 | 13.2                | 20.1 | 9.4   | 19.7    | 27.4 | 10.3  | 28.9     | 32.1 | 8.9   |
| Chronic Obstructive Pulmonary Disease..... | 48                 | 4.2                 | 9.2  | ----- | 8.3     | 15.7 | ----- | 14.6     | 20.5 | ----- |
| Transient Cerebral Ischemia.....           | 23                 | 0.0                 | 2.0  | ----- | 0.0     | 4.5  | ----- | 4.3      | 7.3  | ----- |
| Stroke.....                                | 42                 | 33.3                | 22.7 | ----- | 38.1    | 31.3 | ----- | 42.9     | 35.6 | ----- |
| Hip Fracture.....                          | 29                 | 6.9                 | 9.4  | ----- | 10.3    | 16.6 | ----- | 10.3     | 21.1 | ----- |
| Sepsis.....                                | 12                 | 25.0                | 31.0 | ----- | 33.3    | 38.9 | ----- | 33.3     | 44.0 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 14                 | 0.0                 | 4.0  | ----- | 0.0     | 7.1  | ----- | 7.1      | 9.9  | ----- |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 6                  | 0.0                 | 8.3  | ----- | 0.0     | 15.1 | ----- | 0.0      | 19.0 | ----- |
| Open Reduction of Hip Fracture.....        | 19                 | 5.3                 | 6.3  | ----- | 10.5    | 11.3 | ----- | 10.5     | 15.1 | ----- |
| Prostatectomy.....                         | 31                 | 0.0                 | 1.0  | ----- | 0.0     | 2.2  | ----- | 0.0      | 3.7  | ----- |
| Cholecystectomy.....                       | 8                  | 0.0                 | 1.8  | ----- | 0.0     | 3.1  | ----- | 0.0      | 3.8  | ----- |
| Hysterectomy.....                          | 3                  | 0.0                 | 0.2  | ----- | 0.0     | 0.5  | ----- | 0.0      | 0.9  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



**MARLBOROUGH HOSPITAL**  
Medicare Provider Number: 220049

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 75.9 years  
Proportion female..... 59.1 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 22.9 %  
Transferred from skilled nursing facility..... 7.4 %  
Admitted for elective procedure..... 10.8 %  
Admitted for emergency..... 76.0 %

**COMORBIDITIES:**

Cancer..... 8.2 %  
Chronic cardiovascular disease..... 44.7 %  
Chronic liver disease..... 1.5 %  
Chronic renal disease..... 2.8 %  
Chronic pulmonary disease..... 14.7 %  
Cerebrovascular degeneration..... 6.0 %  
Diabetes mellitus..... 6.4 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 80.9%  
State ..... 16.7%  
Outside State ..... 2.4%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 8.1 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 125  
Occupancy Rate ..... 61.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 45.1 %  
Case Mix Index (CMI) ..... 1.1331

**STAFFING:**

Total Number of Physicians..... 90  
Percent of Physicians Board  
Certified Specialists ..... 60.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 127  
Licensed Practical Nurses ..... 23

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# MARTHAS VINEYARD HOSPITAL

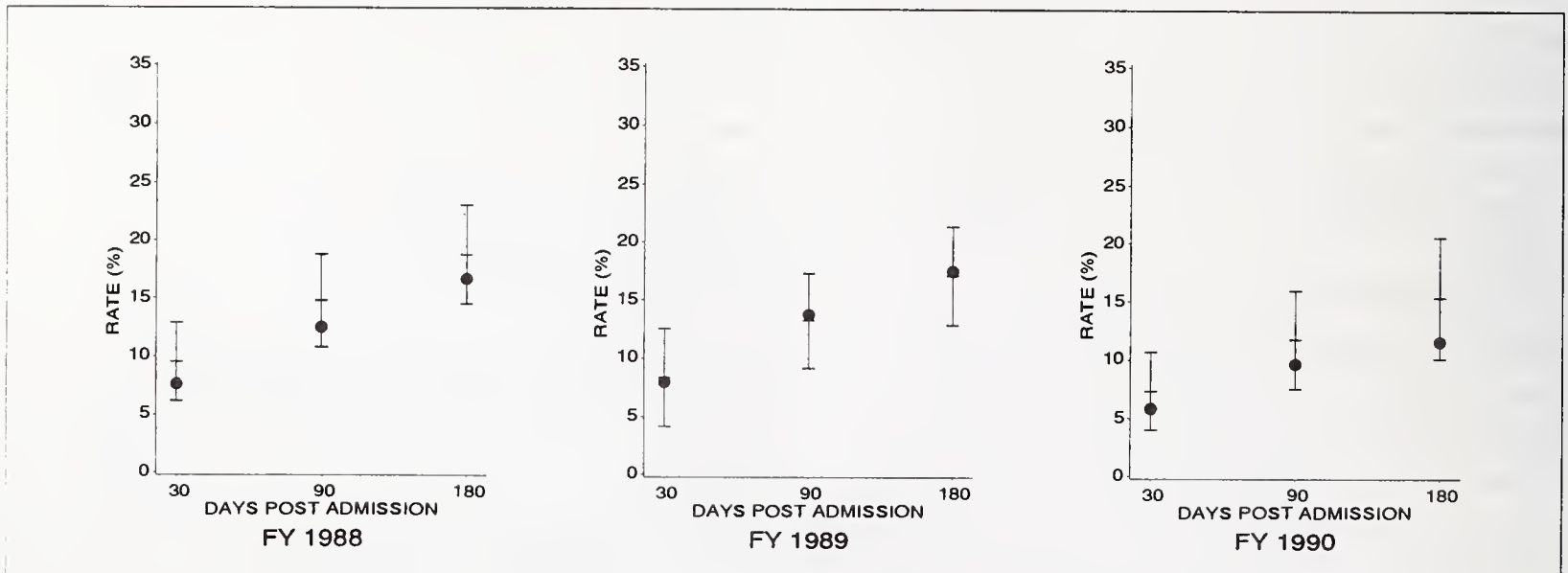
LINTON LANE  
OAK BLUFFS, MA 02557  
Medicare Provider Number: 220123

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 365                | 5.8                 | 7.3  | 1.7  | 9.6     | 11.7 | 2.1  | 11.5     | 15.3 | 2.6  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 15                 | 13.3                | 16.1 | ---- | 20.0    | 19.0 | ---- | 20.0     | 21.5 | ---- |
| Congestive Heart Failure.....              | 20                 | 10.0                | 15.5 | ---- | 20.0    | 24.8 | ---- | 30.0     | 30.8 | ---- |
| Pneumonia/Influenza.....                   | 14                 | 14.3                | 16.2 | ---- | 21.4    | 21.9 | ---- | 28.6     | 25.4 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 5                  | 20.0                | 11.4 | ---- | 20.0    | 18.6 | ---- | 20.0     | 24.1 | ---- |
| Transient Cerebral Ischemia.....           | 4                  | 0.0                 | 1.6  | ---- | 0.0     | 3.5  | ---- | 0.0      | 5.7  | ---- |
| Stroke.....                                | 10                 | 10.0                | 13.3 | ---- | 10.0    | 18.3 | ---- | 10.0     | 21.8 | ---- |
| Hip Fracture.....                          | 4                  | 0.0                 | 5.2  | ---- | 0.0     | 8.7  | ---- | 25.0     | 11.2 | ---- |
| Sepsis.....                                | 1                  | 0.0                 | 5.8  | ---- | 0.0     | 7.9  | ---- | 0.0      | 9.4  | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 1                  | 0.0                 | 2.2  | ---- | 0.0     | 4.5  | ---- | 0.0      | 6.4  | ---- |
| Open Reduction of Hip Fracture.....        | 1                  | 0.0                 | 8.2  | ---- | 0.0     | 12.3 | ---- | 0.0      | 14.6 | ---- |
| Prostatectomy.....                         | 0                  |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 4                  | 25.0                | 5.8  | ---- | 25.0    | 12.6 | ---- | 25.0     | 18.1 | ---- |
| Hysterectomy.....                          | 0                  |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



**MARTHAS VINEYARD HOSPITAL**  
Medicare Provider Number: 220123

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 76.3 years  
Proportion female..... 59.7 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 33.4 %  
Transferred from skilled nursing facility..... 1.4 %  
Admitted for elective procedure..... 0.3 %  
Admitted for emergency..... 64.4 %

**COMORBIDITIES:**

Cancer..... 5.2 %  
Chronic cardiovascular disease..... 30.1 %  
Chronic liver disease..... 2.2 %  
Chronic renal disease..... 2.2 %  
Chronic pulmonary disease..... 9.0 %  
Cerebrovascular degeneration..... 7.1 %  
Diabetes mellitus..... 8.8 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 74.5%  
State ..... 9.2%  
Outside State ..... 16.3%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 6.9 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1991

**PROFILE:**

Total Beds ..... 77  
Ownership/Control..... Private, Non-Profit  
Case Mix Index (CMI) ..... 0.9066

**STAFFING:**

Medical Residents/Interns ..... 2  
Registered Nurses..... 49  
Licensed Practical Nurses ..... 5

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Coronary Care Unit ..... No  
Hospice Care ..... Yes  
Intensive Care Unit ..... Yes  
Organ Transplant ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... Yes  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MARY AND ARTHUR CLAPHAM HOSPITAL

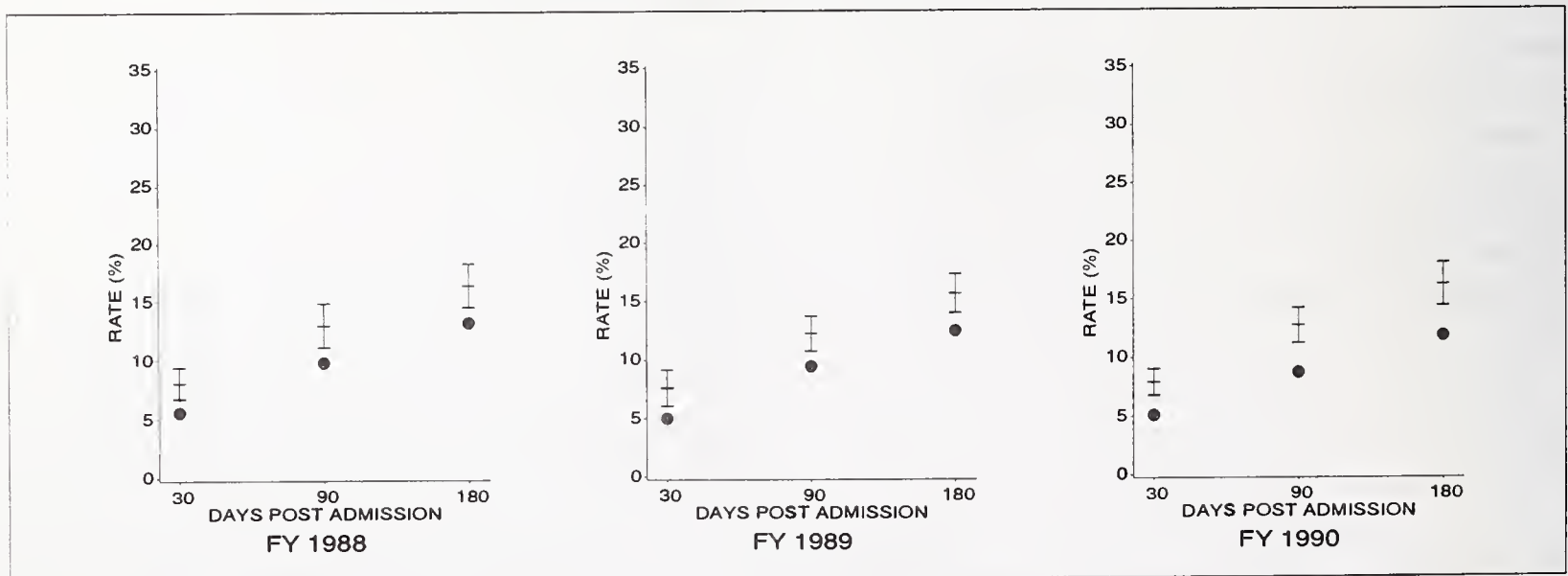
41 MALL RD  
BURLINGTON, MA 01803  
Medicare Provider Number: 220171

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2687            | 5.1                 | 7.9  | 0.6   | 8.7     | 12.7 | 0.8   | 11.8     | 16.2 | 0.9   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 49              | 16.3                | 22.1 | ----- | 20.4    | 25.1 | ----- | 24.5     | 28.1 | ----- |
| Congestive Heart Failure.....              | 61              | 8.2                 | 15.2 | 7.5   | 19.7    | 24.0 | 8.0   | 24.6     | 30.6 | 8.1   |
| Pneumonia/Influenza.....                   | 78              | 10.3                | 15.1 | 6.5   | 16.7    | 20.9 | 6.7   | 17.9     | 24.7 | 6.9   |
| Chronic Obstructive Pulmonary Disease..... | 22              | 18.2                | 10.6 | ----- | 22.7    | 18.3 | ----- | 22.7     | 23.9 | ----- |
| Transient Cerebral Ischemia.....           | 27              | 0.0                 | 1.7  | ----- | 0.0     | 3.7  | ----- | 3.7      | 6.0  | ----- |
| Stroke.....                                | 73              | 11.0                | 15.6 | 7.6   | 16.4    | 22.0 | 9.5   | 16.4     | 25.6 | 10.9  |
| Hip Fracture.....                          | 22              | 9.1                 | 6.2  | ----- | 9.1     | 10.9 | ----- | 13.6     | 14.3 | ----- |
| Sepsis.....                                | 15              | 6.7                 | 18.3 | ----- | 13.3    | 26.4 | ----- | 13.3     | 31.6 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 6               | 0.0                 | 4.3  | ----- | 0.0     | 7.5  | ----- | 0.0      | 10.9 | ----- |
| Coronary Artery Bypass Graft.....          | 32              | 0.0                 | 6.3  | ----- | 0.0     | 8.9  | ----- | 0.0      | 10.4 | ----- |
| Initial Pacemaker Insertion.....           | 20              | 0.0                 | 2.3  | ----- | 0.0     | 4.3  | ----- | 0.0      | 6.2  | ----- |
| Carotid Endarterectomy.....                | 13              | 0.0                 | 1.9  | ----- | 0.0     | 3.8  | ----- | 0.0      | 5.6  | ----- |
| Hip Replacement/Reconstruction.....        | 64              | 0.0                 | 0.8  | ----- | 0.0     | 1.5  | ----- | 0.0      | 2.2  | ----- |
| Open Reduction of Hip Fracture.....        | 14              | 0.0                 | 5.6  | ----- | 0.0     | 10.3 | ----- | 7.1      | 13.7 | ----- |
| Prostatectomy.....                         | 92              | 0.0                 | 0.9  | 1.4   | 1.1     | 2.1  | 2.1   | 2.2      | 3.6  | 3.0   |
| Cholecystectomy.....                       | 38              | 2.6                 | 3.7  | ----- | 5.3     | 7.7  | ----- | 5.3      | 10.8 | ----- |
| Hysterectomy.....                          | 43              | 2.3                 | 2.1  | ----- | 2.3     | 4.4  | ----- | 2.3      | 6.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





**MARY AND ARTHUR CLAPHAM HOSPITAL**  
Medicare Provider Number: 220171

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 72.2 years  
Proportion female..... 47.4 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 2.8 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 26.2 %  
Admitted for emergency..... 41.1 %

**COMORBIDITIES:**

Cancer..... 13.7 %  
Chronic cardiovascular disease..... 30.9 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 3.3 %  
Chronic pulmonary disease..... 9.4 %  
Cerebrovascular degeneration..... 1.8 %  
Diabetes mellitus..... 5.1 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 44.3%  
State ..... 35.2%  
Outside State ..... 20.5%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 8.6 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 272  
Occupancy Rate ..... 91.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 37.2 %  
Case Mix Index (CMI) ..... 1.4376

**STAFFING:**

Total Number of Physicians..... 244  
Percent of Physicians Board  
Certified Specialists ..... 90.2 %  
Medical Residents/Interns ..... 68  
Registered Nurses..... 537  
Licensed Practical Nurses ..... 1

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MARY LANE HOSPITAL

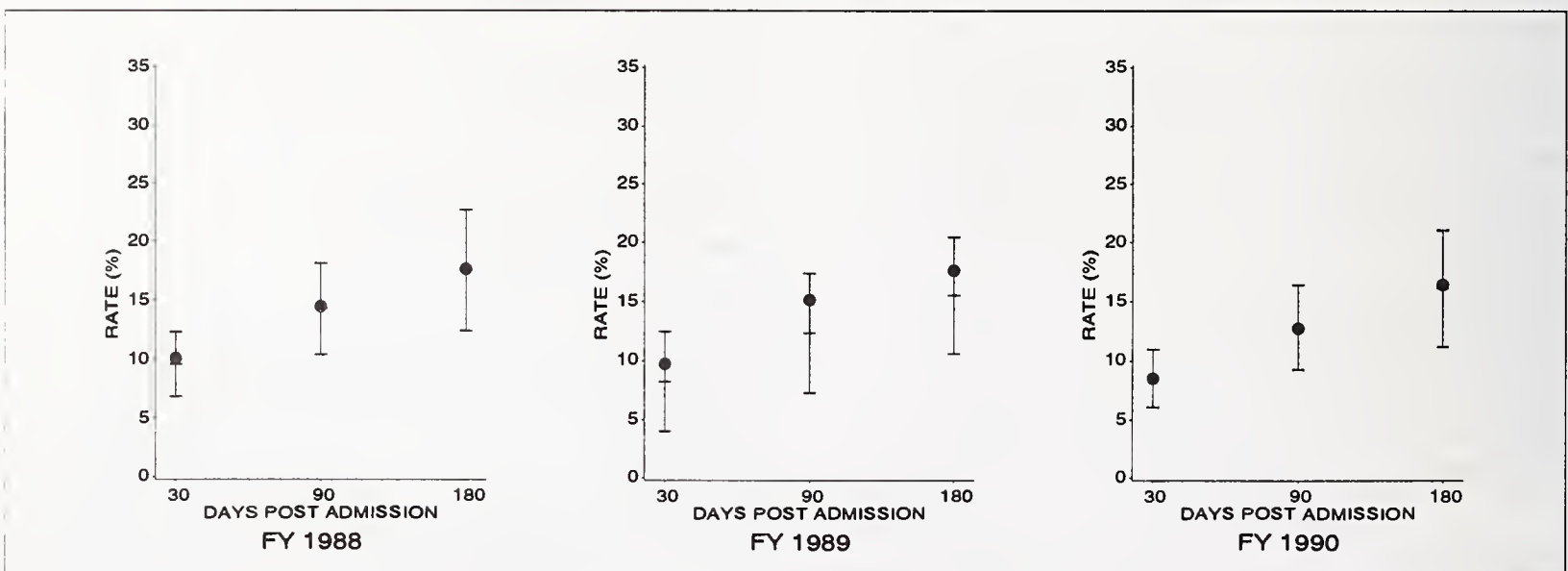
85 SOUTH ST  
WARE, MA 01082  
Medicare Provider Number: 220050

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 519             | 8.5                 | 8.5  | 1.2   | 12.7    | 12.8 | 1.8   | 16.4     | 16.1 | 2.5   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 23              | 21.7                | 27.9 | ----- | 30.4    | 31.3 | ----- | 34.8     | 34.5 | ----- |
| Congestive Heart Failure.....              | 34              | 8.8                 | 13.6 | ----- | 17.6    | 21.2 | ----- | 20.6     | 27.1 | ----- |
| Pneumonia/Influenza.....                   | 30              | 13.3                | 16.9 | ----- | 23.3    | 22.9 | ----- | 33.3     | 27.1 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 9               | 0.0                 | 5.2  | ----- | 0.0     | 10.3 | ----- | 0.0      | 14.9 | ----- |
| Transient Cerebral Ischemia.....           | 18              | 0.0                 | 1.4  | ----- | 5.6     | 3.2  | ----- | 11.1     | 5.6  | ----- |
| Stroke.....                                | 16              | 18.8                | 15.3 | ----- | 31.3    | 20.8 | ----- | 31.3     | 24.7 | ----- |
| Hip Fracture.....                          | 12              | 8.3                 | 5.4  | ----- | 8.3     | 9.7  | ----- | 8.3      | 12.9 | ----- |
| Sepsis.....                                | 1               | 0.0                 | 15.9 | ----- | 0.0     | 21.3 | ----- | 0.0      | 23.8 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 5               | 0.0                 | 4.2  | ----- | 0.0     | 7.7  | ----- | 0.0      | 10.5 | ----- |
| Open Reduction of Hip Fracture.....        | 5               | 0.0                 | 2.4  | ----- | 0.0     | 4.4  | ----- | 0.0      | 6.1  | ----- |
| Prostatectomy.....                         | 11              | 0.0                 | 1.3  | ----- | 0.0     | 3.3  | ----- | 0.0      | 5.7  | ----- |
| Cholecystectomy.....                       | 7               | 0.0                 | 1.9  | ----- | 0.0     | 3.5  | ----- | 0.0      | 4.5  | ----- |
| Hysterectomy.....                          | 2               | 0.0                 | 0.2  | ----- | 0.0     | 0.6  | ----- | 0.0      | 1.0  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



**MARY LANE HOSPITAL**  
Medicare Provider Number: 220050

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 76.8 years  
Proportion female..... 57.4 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 25.6 %  
Transferred from skilled nursing facility..... 0.2 %  
Admitted for elective procedure..... 12.3 %  
Admitted for emergency..... 28.3 %

**COMORBIDITIES:**

Cancer..... 4.8 %  
Chronic cardiovascular disease..... 23.9 %  
Chronic liver disease..... 1.3 %  
Chronic renal disease..... 1.9 %  
Chronic pulmonary disease..... 8.5 %  
Cerebrovascular degeneration..... 2.5 %  
Diabetes mellitus..... 4.6 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 53.8%  
State ..... 45.2%  
Outside State ..... 1.0%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 8.2 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 52  
Occupancy Rate ..... 57.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 44.5 %  
Case Mix Index (CMI) ..... 1.0123

**STAFFING:**

Total Number of Physicians..... 29  
Percent of Physicians Board  
Certified Specialists ..... 62.1 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 55  
Licensed Practical Nurses..... 16

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# MASSACHUSETTS EYE AND EAR INFIRMARY

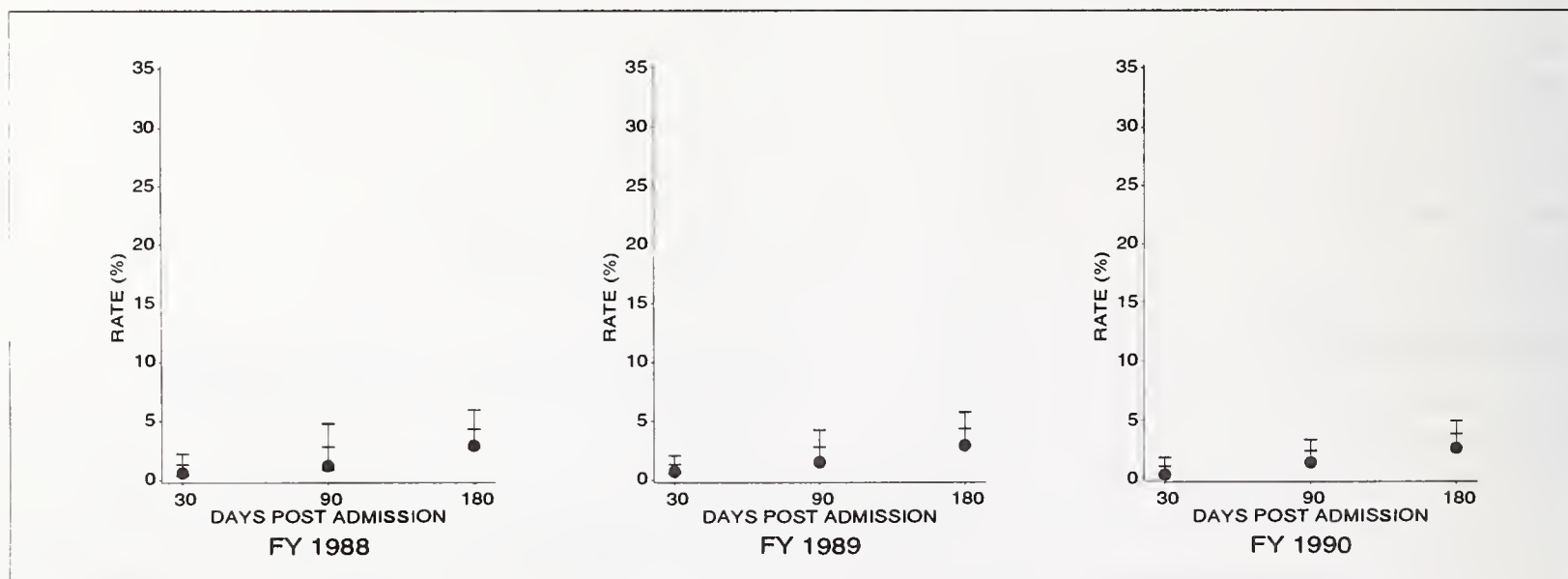
243 CHARLES ST  
BOSTON, MA 02114  
Medicare Provider Number: 220075

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |     |         |      |     |          |      |     |
|--------------------------------------------|--------------------|---------------------|------|-----|---------|------|-----|----------|------|-----|
|                                            |                    | 30 DAYS             |      |     | 90 DAYS |      |     | 180 DAYS |      |     |
|                                            |                    | OBS                 | PRED | SD* | OBS     | PRED | SD* | OBS      | PRED | SD* |
| ALL CAUSES.....                            | 1808               | 0.4                 | 1.1  | 0.4 | 1.4     | 2.4  | 0.5 | 2.6      | 3.8  | 0.6 |
| CONDITIONS:                                |                    |                     |      |     |         |      |     |          |      |     |
| Acute Myocardial Infarction.....           | 0                  |                     |      |     |         |      |     |          |      |     |
| Congestive Heart Failure.....              | 0                  |                     |      |     |         |      |     |          |      |     |
| Pneumonia/Influenza.....                   | 0                  |                     |      |     |         |      |     |          |      |     |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |     |         |      |     |          |      |     |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |     |         |      |     |          |      |     |
| Stroke.....                                | 0                  |                     |      |     |         |      |     |          |      |     |
| Hip Fracture.....                          | 0                  |                     |      |     |         |      |     |          |      |     |
| Sepsis.....                                | 0                  |                     |      |     |         |      |     |          |      |     |
| PROCEDURES:                                |                    |                     |      |     |         |      |     |          |      |     |
| Angioplasty.....                           | 0                  |                     |      |     |         |      |     |          |      |     |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |     |         |      |     |          |      |     |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |     |         |      |     |          |      |     |
| Carotid Endarterectomy.....                | 0                  |                     |      |     |         |      |     |          |      |     |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |     |         |      |     |          |      |     |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |     |         |      |     |          |      |     |
| Prostatectomy.....                         | 0                  |                     |      |     |         |      |     |          |      |     |
| Cholecystectomy.....                       | 0                  |                     |      |     |         |      |     |          |      |     |
| Hysterectomy.....                          | 0                  |                     |      |     |         |      |     |          |      |     |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# MASSACHUSETTS EYE AND EAR INFIRMARY

Medicare Provider Number: 220075

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.0 years  
Proportion female..... 58.6 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 95.0 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 72.0 %  
Admitted for emergency..... 24.2 %

### COMORBIDITIES:

Cancer..... 3.0 %  
Chronic cardiovascular disease..... 24.7 %  
Chronic liver disease..... 0.2 %  
Chronic renal disease..... 0.9 %  
Chronic pulmonary disease..... 9.0 %  
Cerebrovascular degeneration..... 0.8 %  
Diabetes mellitus..... 10.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 15.6%  
State ..... 63.3%  
Outside State ..... 21.1%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 3.2 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 109  
Occupancy Rate ..... 58.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 28.1 %  
Case Mix Index (CMI) ..... 0.7532

### STAFFING:

Total Number of Physicians..... 298  
Percent of Physicians Board  
Certified Specialists..... 10.7 %  
Medical Residents/Interns ..... 41  
Registered Nurses..... 138  
Licensed Practical Nurses ..... 16

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MASSACHUSETTS GENERAL HOSPITAL

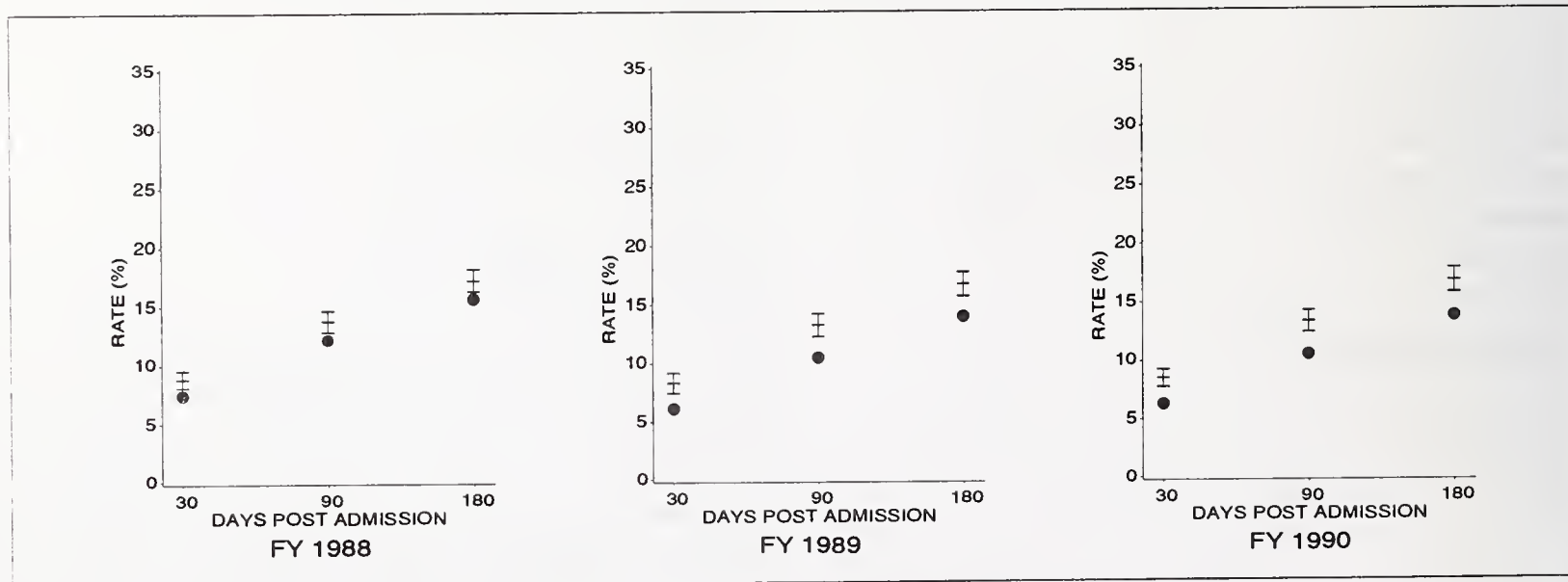
FRUIT ST  
BOSTON, MA 02114  
Medicare Provider Number: 220071

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 7168            | 6.3                 | 8.5  | 0.4   | 10.5    | 13.3 | 0.5   | 13.7     | 16.8 | 0.5   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 179             | 14.5                | 25.2 | 4.5   | 18.4    | 29.0 | 4.6   | 21.2     | 32.0 | 4.8   |
| Congestive Heart Failure.....              | 229             | 10.9                | 15.5 | 3.8   | 22.7    | 24.5 | 3.1   | 28.4     | 30.9 | 3.4   |
| Pneumonia/Influenza.....                   | 167             | 18.0                | 14.5 | 3.3   | 21.6    | 20.0 | 3.2   | 23.4     | 23.9 | 3.3   |
| Chronic Obstructive Pulmonary Disease..... | 45              | 8.9                 | 5.8  | ----- | 11.1    | 10.5 | ----- | 11.1     | 14.4 | ----- |
| Transient Cerebral Ischemia.....           | 40              | 2.5                 | 1.8  | ----- | 7.5     | 3.8  | ----- | 7.5      | 6.0  | ----- |
| Stroke.....                                | 155             | 11.6                | 22.2 | 4.8   | 17.4    | 29.1 | 5.3   | 21.3     | 32.9 | 5.4   |
| Hip Fracture.....                          | 118             | 2.5                 | 6.8  | 3.5   | 6.8     | 11.6 | 4.3   | 11.0     | 14.9 | 4.8   |
| Sepsis.....                                | 21              | 23.8                | 25.1 | ----- | 33.3    | 35.8 | ----- | 42.9     | 41.1 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 115             | 0.0                 | 3.2  | 3.7   | 0.9     | 4.4  | 4.2   | 2.6      | 5.4  | 3.9   |
| Coronary Artery Bypass Graft.....          | 240             | 4.2                 | 6.2  | 2.0   | 6.3     | 9.1  | 2.7   | 6.3      | 10.4 | 3.0   |
| Initial Pacemaker Insertion.....           | 55              | 0.0                 | 3.0  | 3.7   | 3.6     | 5.7  | 3.6   | 3.6      | 8.2  | 5.5   |
| Carotid Endarterectomy.....                | 46              | 2.2                 | 1.6  | ----- | 2.2     | 2.8  | ----- | 2.2      | 4.0  | ----- |
| Hip Replacement/Reconstruction.....        | 226             | 0.4                 | 1.4  | 1.0   | 0.9     | 2.7  | 1.5   | 1.8      | 3.7  | 1.7   |
| Open Reduction of Hip Fracture.....        | 66              | 3.0                 | 6.6  | 5.2   | 7.6     | 11.5 | 6.6   | 12.1     | 15.0 | 6.8   |
| Prostatectomy.....                         | 229             | 0.9                 | 0.9  | 0.7   | 2.6     | 2.2  | 1.1   | 3.5      | 3.8  | 1.4   |
| Cholecystectomy.....                       | 112             | 2.7                 | 3.9  | 2.4   | 6.3     | 7.2  | 2.9   | 8.0      | 9.6  | 3.1   |
| Hysterectomy.....                          | 51              | 0.0                 | 0.8  | 1.4   | 0.0     | 1.9  | 2.5   | 2.0      | 3.1  | 2.7   |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# MASSACHUSETTS GENERAL HOSPITAL

Medicare Provider Number: 220071

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 72.3 years  
Proportion female..... 49.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 42.7 %  
Transferred from skilled nursing facility..... 0.8 %  
Admitted for elective procedure..... 39.4 %  
Admitted for emergency..... 46.7 %

### COMORBIDITIES:

Cancer..... 10.9 %  
Chronic cardiovascular disease..... 37.9 %  
Chronic liver disease..... 1.4 %  
Chronic renal disease..... 3.9 %  
Chronic pulmonary disease..... 12.1 %  
Cerebrovascular degeneration..... 3.5 %  
Diabetes mellitus..... 5.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 32.3%  
State ..... 55.2%  
Outside State ..... 12.5%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 11.1 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 989  
Occupancy Rate ..... 83.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 33.4 %  
Case Mix Index (CMI) ..... 1.7669

### STAFFING:

Total Number of Physicians.....1286  
Percent of Physicians Board  
Certified Specialists..... 97.0 %  
Medical Residents/Interns ..... 444  
Registered Nurses.....1525  
Licensed Practical Nurses ..... 47

### SPECIALTY SERVICES:

Burn Unit ..... Yes  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... No  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MEDICAL CENTER OF CENTRAL MASSACHUSETTS

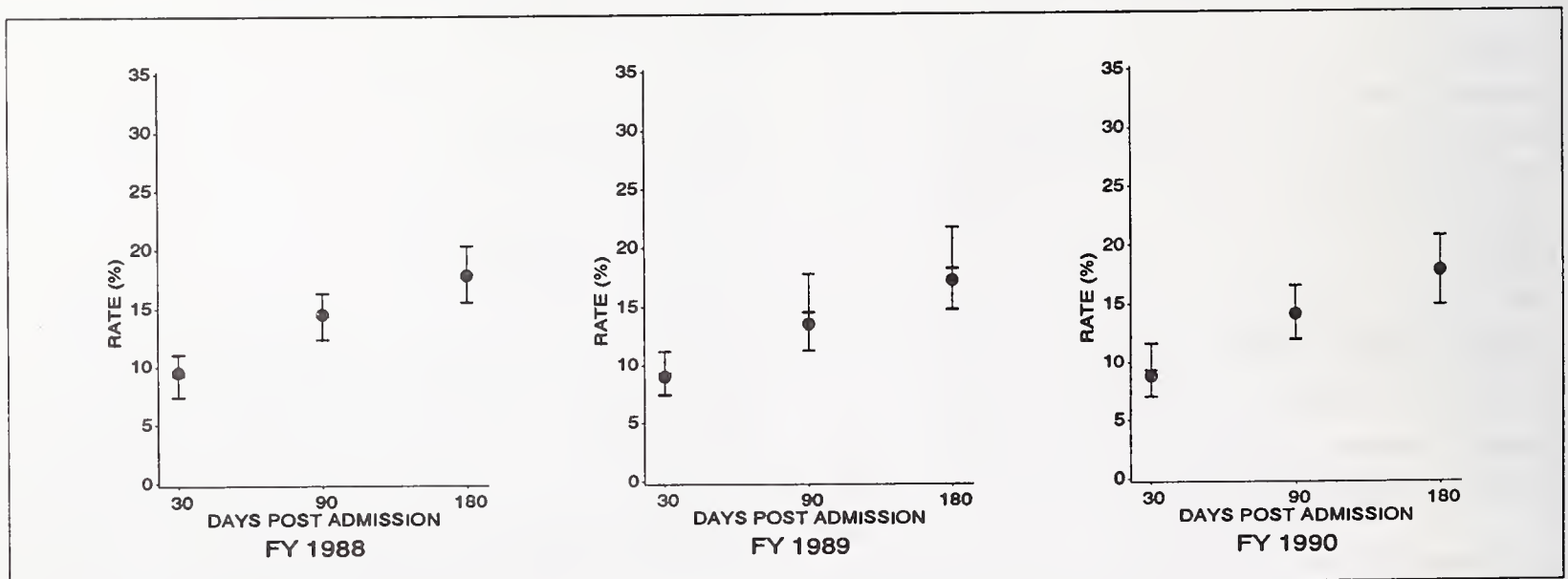
281 LINCOLN ST  
WORCESTER, MA 01605  
Medicare Provider Number: 220057

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1628            | 8.8                 | 9.3  | 1.1  | 14.1    | 14.2 | 1.2  | 17.8     | 17.8 | 1.5  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 70              | 20.0                | 24.6 | 8.3  | 25.7    | 28.4 | 8.7  | 30.0     | 31.4 | 7.5  |
| Congestive Heart Failure.....              | 104             | 11.5                | 14.6 | 5.6  | 18.3    | 23.4 | 7.9  | 21.2     | 29.7 | 9.1  |
| Pneumonia/Influenza.....                   | 96              | 16.7                | 16.0 | 4.1  | 27.1    | 22.0 | 5.9  | 28.1     | 26.1 | 5.6  |
| Chronic Obstructive Pulmonary Disease..... | 17              | 0.0                 | 7.8  | ---- | 11.8    | 12.9 | ---- | 11.8     | 17.3 | ---- |
| Transient Cerebral Ischemia.....           | 16              | 0.0                 | 1.6  | ---- | 0.0     | 3.7  | ---- | 0.0      | 6.3  | ---- |
| Stroke.....                                | 41              | 29.3                | 20.1 | ---- | 29.3    | 27.6 | ---- | 34.1     | 31.5 | ---- |
| Hip Fracture.....                          | 63              | 4.8                 | 5.7  | 3.4  | 11.1    | 10.6 | 4.8  | 15.9     | 14.4 | 5.2  |
| Sepsis.....                                | 19              | 26.3                | 19.0 | ---- | 31.6    | 25.4 | ---- | 36.8     | 29.5 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 11              | 0.0                 | 2.0  | ---- | 0.0     | 4.1  | ---- | 0.0      | 6.0  | ---- |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 39              | 2.6                 | 2.5  | ---- | 5.1     | 5.0  | ---- | 7.7      | 7.0  | ---- |
| Open Reduction of Hip Fracture.....        | 13              | 7.7                 | 5.5  | ---- | 15.4    | 10.3 | ---- | 23.1     | 13.8 | ---- |
| Prostatectomy.....                         | 56              | 0.0                 | 1.0  | ---- | 0.0     | 2.3  | ---- | 0.0      | 4.0  | ---- |
| Cholecystectomy.....                       | 27              | 0.0                 | 2.0  | ---- | 0.0     | 3.7  | ---- | 0.0      | 4.7  | ---- |
| Hysterectomy.....                          | 8               | 0.0                 | 0.1  | ---- | 0.0     | 0.2  | ---- | 0.0      | 0.4  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# MEDICAL CENTER OF CENTRAL MASSACHUSETTS

Medicare Provider Number: 220057

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.1 years  
Proportion female..... 60.6 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 95.7 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 15.3 %  
Admitted for emergency..... 81.8 %

### COMORBIDITIES:

Cancer..... 8.2 %  
Chronic cardiovascular disease..... 30.9 %  
Chronic liver disease..... 0.7 %  
Chronic renal disease..... 2.5 %  
Chronic pulmonary disease..... 12.8 %  
Cerebrovascular degeneration..... 6.0 %  
Diabetes mellitus..... 6.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 96.3%  
State..... 2.0%  
Outside State..... 1.7%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 10.8 Days  
State..... 10.1 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 476  
Occupancy Rate..... 71.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges..... 35.1 %  
Case Mix Index (CMI)..... 1.2186

### STAFFING:

Total Number of Physicians..... 343  
Percent of Physicians Board  
Certified Specialists..... 78.4 %  
Medical Residents/Interns..... 48  
Registered Nurses..... 468  
Licensed Practical Nurses..... 99

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... Yes  
Comprehensive Geriatric..... Yes  
Hospice Care..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... No  
Other Intensive Care..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... Yes  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# MELROSE-WAKEFIELD HOSPITAL

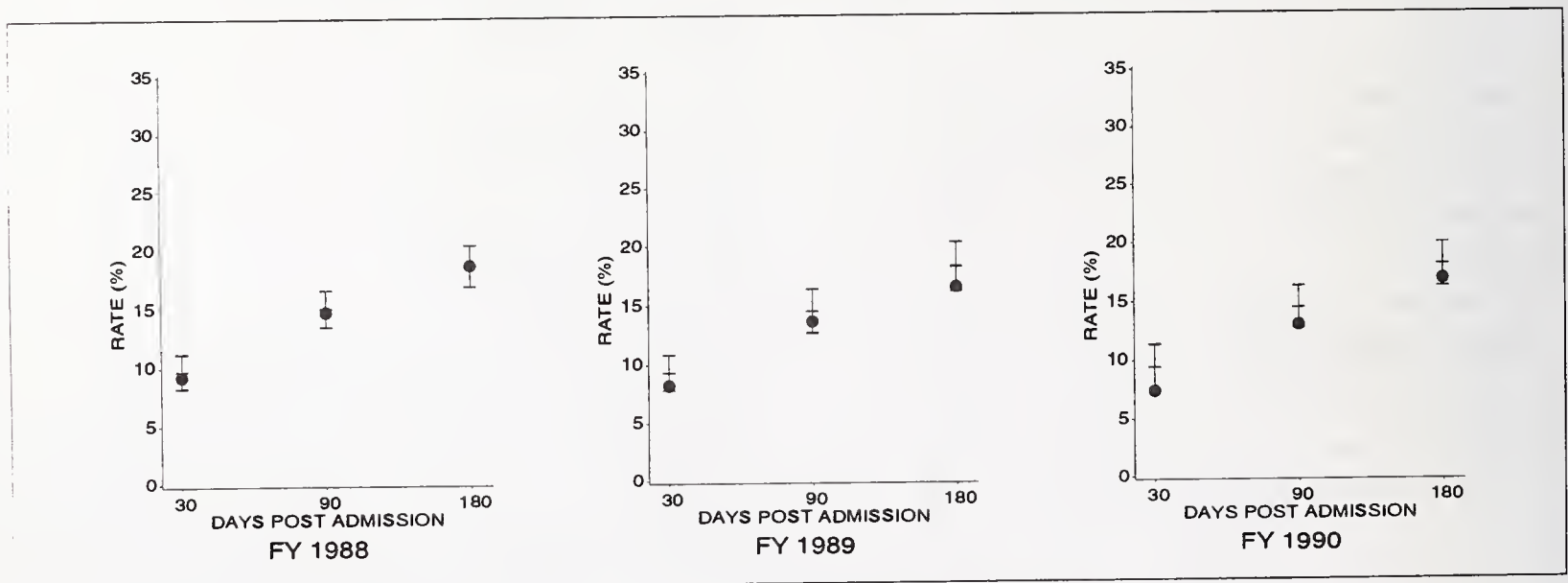
585 LEBANON ST  
MELROSE, MA 02176  
Medicare Provider Number: 220106

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2195            | 7.4                 | 9.4  | 1.0   | 13.0    | 14.5 | 0.9   | 16.9     | 18.1 | 0.9   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 74              | 20.3                | 20.7 | 4.9   | 21.6    | 24.3 | 5.6   | 28.4     | 27.2 | 6.2   |
| Congestive Heart Failure.....              | 155             | 10.3                | 17.8 | 4.5   | 21.3    | 27.7 | 5.4   | 25.8     | 34.6 | 5.3   |
| Pneumonia/Influenza.....                   | 125             | 12.0                | 18.9 | 5.2   | 19.2    | 25.4 | 4.7   | 24.8     | 29.5 | 4.5   |
| Chronic Obstructive Pulmonary Disease..... | 23              | 0.0                 | 6.5  | ----- | 4.3     | 12.0 | ----- | 4.3      | 16.6 | ----- |
| Transient Cerebral Ischemia.....           | 46              | 0.0                 | 1.7  | ----- | 2.2     | 4.0  | ----- | 2.2      | 6.6  | ----- |
| Stroke.....                                | 70              | 18.6                | 19.2 | 5.2   | 32.9    | 26.2 | 6.8   | 35.7     | 30.0 | 6.6   |
| Hip Fracture.....                          | 51              | 5.9                 | 6.1  | 3.4   | 7.8     | 11.1 | 5.4   | 9.8      | 14.4 | 6.9   |
| Sepsis.....                                | 9               | 33.3                | 27.7 | ----- | 44.4    | 35.0 | ----- | 44.4     | 39.4 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 26              | 0.0                 | 2.1  | ----- | 0.0     | 4.5  | ----- | 3.8      | 6.7  | ----- |
| Carotid Endarterectomy.....                | 18              | 0.0                 | 1.1  | ----- | 0.0     | 2.2  | ----- | 5.6      | 3.4  | ----- |
| Hip Replacement/Reconstruction.....        | 31              | 6.5                 | 4.9  | ----- | 6.5     | 9.1  | ----- | 9.7      | 11.8 | ----- |
| Open Reduction of Hip Fracture.....        | 34              | 5.9                 | 4.6  | ----- | 8.8     | 8.7  | ----- | 8.8      | 11.7 | ----- |
| Prostatectomy.....                         | 56              | 0.0                 | 1.2  | 2.1   | 1.8     | 2.9  | 3.1   | 5.4      | 5.0  | 3.7   |
| Cholecystectomy.....                       | 36              | 5.6                 | 1.5  | ----- | 5.6     | 2.7  | ----- | 5.6      | 3.6  | ----- |
| Hysterectomy.....                          | 9               | 0.0                 | 0.1  | ----- | 0.0     | 0.3  | ----- | 0.0      | 0.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# MELROSE-WAKEFIELD HOSPITAL

Medicare Provider Number: 220106

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.1 years  
Proportion female..... 61.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 30.6 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 12.5 %  
Admitted for emergency..... 66.1 %

### COMORBIDITIES:

Cancer..... 7.9 %  
Chronic cardiovascular disease..... 30.3 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 3.1 %  
Chronic pulmonary disease..... 12.1 %  
Cerebrovascular degeneration..... 4.3 %  
Diabetes mellitus..... 5.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 75.2%  
State ..... 22.4%  
Outside State ..... 2.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.9 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 243  
Occupancy Rate ..... 72.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 41.2 %  
Case Mix Index (CMI) ..... 1.1176

### STAFFING:

Total Number of Physicians..... 140  
Percent of Physicians Board  
Certified Specialists ..... 77.1 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 207  
Licensed Practical Nurses ..... 14

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

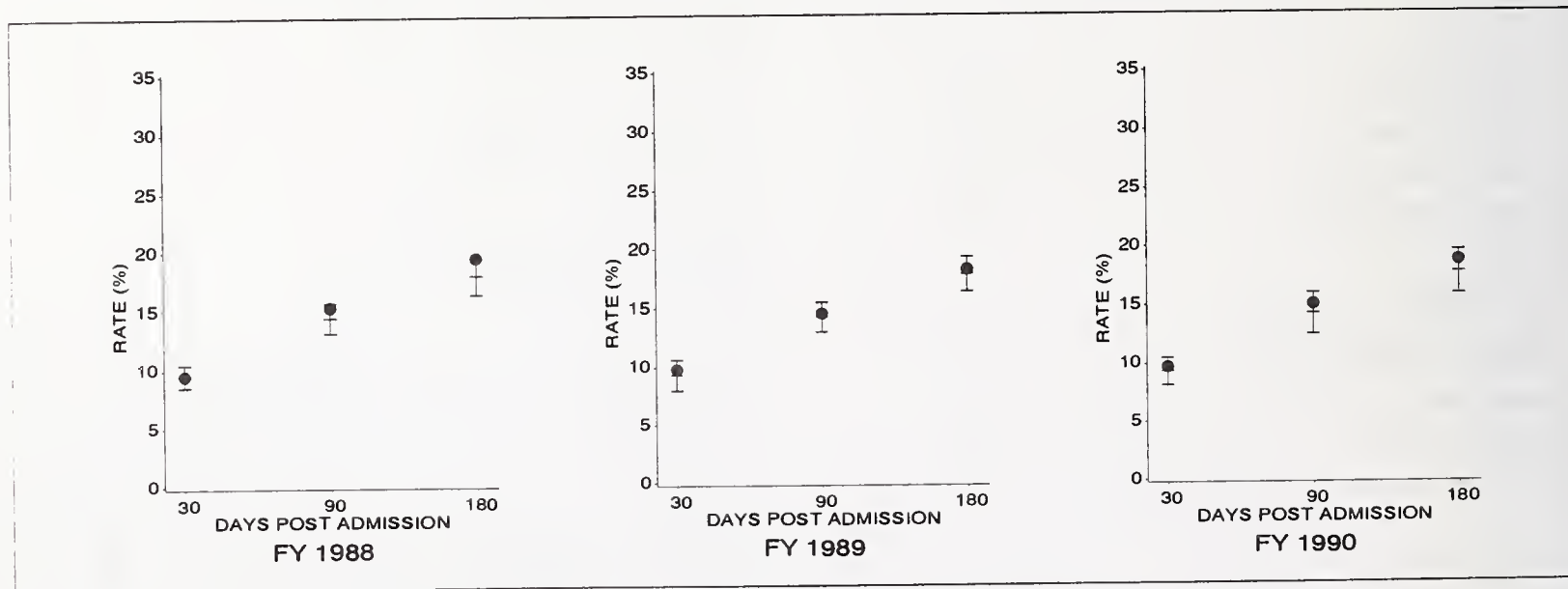
**MERCY HOSPITAL**  
271 CAREW STREET  
SPRINGFIELD, MA 01104  
Medicare Provider Number: 220066

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 3557               | 9.7                 | 9.3  | 0.6   | 15.0    | 14.2 | 0.9   | 18.7     | 17.7 | 0.9   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 94                 | 42.6                | 28.8 | 7.4   | 45.7    | 31.4 | 7.4   | 45.7     | 33.9 | 7.2   |
| Congestive Heart Failure.....              | 206                | 11.2                | 15.0 | 4.4   | 23.3    | 23.8 | 3.1   | 30.1     | 30.1 | 3.2   |
| Pneumonia/Influenza.....                   | 183                | 18.0                | 15.7 | 3.2   | 24.0    | 21.8 | 4.0   | 29.5     | 25.7 | 3.8   |
| Chronic Obstructive Pulmonary Disease..... | 54                 | 5.6                 | 8.3  | 5.7   | 13.0    | 14.4 | 7.7   | 14.8     | 18.7 | 7.0   |
| Transient Cerebral Ischemia.....           | 34                 | 0.0                 | 1.6  | ----- | 0.0     | 3.8  | ----- | 2.9      | 6.4  | ----- |
| Stroke.....                                | 133                | 18.0                | 18.9 | 3.5   | 22.6    | 25.6 | 4.1   | 25.6     | 29.3 | 4.8   |
| Hip Fracture.....                          | 103                | 8.7                 | 6.4  | 3.4   | 10.7    | 11.3 | 3.2   | 13.6     | 14.7 | 3.9   |
| Sepsis.....                                | 28                 | 28.6                | 21.9 | ----- | 28.6    | 29.4 | ----- | 32.1     | 34.0 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 18                 | 0.0                 | 2.6  | ----- | 0.0     | 5.3  | ----- | 0.0      | 7.9  | ----- |
| Carotid Endarterectomy.....                | 9                  | 0.0                 | 1.3  | ----- | 0.0     | 2.5  | ----- | 0.0      | 3.7  | ----- |
| Hip Replacement/Reconstruction.....        | 72                 | 2.8                 | 3.5  | 2.3   | 4.2     | 6.4  | 3.6   | 5.6      | 8.5  | 4.1   |
| Open Reduction of Hip Fracture.....        | 55                 | 7.3                 | 6.3  | 3.4   | 9.1     | 11.4 | 5.3   | 14.5     | 15.1 | 4.9   |
| Prostatectomy.....                         | 165                | 1.2                 | 1.0  | 0.8   | 2.4     | 2.6  | 1.4   | 6.1      | 4.4  | 2.1   |
| Cholecystectomy.....                       | 71                 | 2.8                 | 2.2  | 2.1   | 4.2     | 4.0  | 2.5   | 5.6      | 5.3  | 2.7   |
| Hysterectomy.....                          | 22                 | 0.0                 | 0.3  | ----- | 4.5     | 0.7  | ----- | 9.1      | 1.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$  SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**





**MERCY HOSPITAL**  
Medicare Provider Number: 220066

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 75.7 years  
Proportion female..... 56.7 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 38.6 %  
Transferred from skilled nursing facility..... 1.8 %  
Admitted for elective procedure..... 23.9 %  
Admitted for emergency..... 55.8 %

**COMORBIDITIES:**

Cancer..... 7.2 %  
Chronic cardiovascular disease..... 31.1 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 3.3 %  
Chronic pulmonary disease..... 13.8 %  
Cerebrovascular degeneration..... 3.9 %  
Diabetes mellitus..... 8.3 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 92.8%  
State ..... 3.0%  
Outside State ..... 4.2%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 10.3 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 330  
Occupancy Rate ..... 79.0 %  
Ownership/Control..... Church  
Medicare Discharges ..... 51.5 %  
Case Mix Index (CMI) ..... 1.3035

**STAFFING:**

Total Number of Physicians..... 123  
Percent of Physicians Board  
Certified Specialists..... 37.4 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 267  
Licensed Practical Nurses ..... 69

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MILFORD WHITINSVILLE REGIONAL HOSPITAL

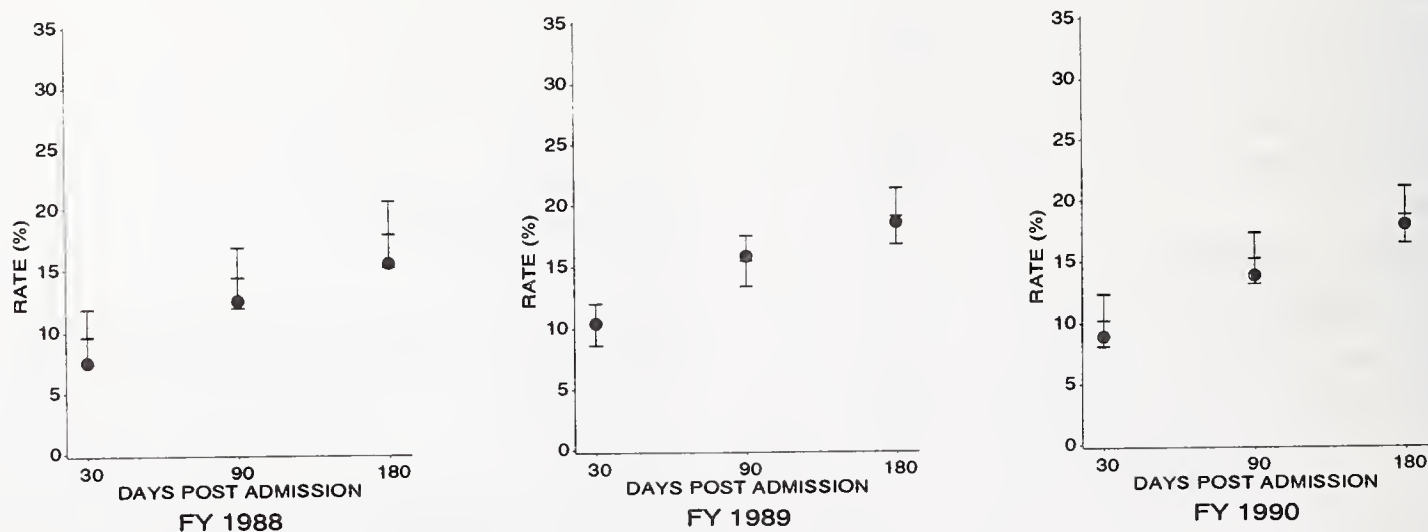
14 PROSPECT ST  
MILFORD, MA 01757  
Medicare Provider Number: 220090

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1510            | 8.9                 | 10.2 | 1.1   | 13.8    | 15.2 | 1.0   | 17.9     | 18.7 | 1.2   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 52              | 28.8                | 27.4 | 7.6   | 34.6    | 31.7 | 8.5   | 38.5     | 35.1 | 8.8   |
| Congestive Heart Failure.....              | 82              | 14.6                | 15.7 | 4.9   | 20.7    | 24.4 | 6.5   | 30.5     | 30.7 | 6.0   |
| Pneumonia/Influenza.....                   | 90              | 14.4                | 17.0 | 5.0   | 24.4    | 23.5 | 4.6   | 28.9     | 27.7 | 4.9   |
| Chronic Obstructive Pulmonary Disease..... | 29              | 10.3                | 10.4 | ----- | 20.7    | 18.1 | ----- | 20.7     | 23.2 | ----- |
| Transient Cerebral Ischemia.....           | 24              | 0.0                 | 2.8  | ----- | 0.0     | 6.1  | ----- | 0.0      | 9.3  | ----- |
| Stroke.....                                | 68              | 25.0                | 23.5 | 5.5   | 30.9    | 30.3 | 6.2   | 39.7     | 34.1 | 7.4   |
| Hip Fracture.....                          | 35              | 2.9                 | 6.0  | ----- | 8.6     | 11.1 | ----- | 14.3     | 14.7 | ----- |
| Sepsis.....                                | 17              | 11.8                | 22.2 | ----- | 23.5    | 28.9 | ----- | 23.5     | 33.4 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 13              | 0.0                 | 2.6  | ----- | 0.0     | 4.3  | ----- | 7.7      | 5.8  | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 29              | 3.4                 | 3.7  | ----- | 6.9     | 6.9  | ----- | 10.3     | 9.3  | ----- |
| Open Reduction of Hip Fracture.....        | 16              | 0.0                 | 6.0  | ----- | 6.3     | 11.3 | ----- | 12.5     | 15.1 | ----- |
| Prostatectomy.....                         | 33              | 6.1                 | 0.8  | ----- | 6.1     | 1.8  | ----- | 9.1      | 3.0  | ----- |
| Cholecystectomy.....                       | 21              | 4.8                 | 1.5  | ----- | 4.8     | 2.5  | ----- | 4.8      | 3.2  | ----- |
| Hysterectomy.....                          | 13              | 0.0                 | 0.3  | ----- | 0.0     | 0.7  | ----- | 0.0      | 1.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# MILFORD WHITINSVILLE REGIONAL HOSPITAL

Medicare Provider Number: 220090

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.5 years  
Proportion female..... 62.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 26.2 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 11.0 %  
Admitted for emergency..... 34.5 %

### COMORBIDITIES:

Cancer..... 5.9 %  
Chronic cardiovascular disease..... 35.2 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 2.6 %  
Chronic pulmonary disease..... 11.5 %  
Cerebrovascular degeneration..... 5.4 %  
Diabetes mellitus..... 7.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 65.7%  
State ..... 31.1 %  
Outside State ..... 3.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.7 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 182  
Occupancy Rate ..... 65.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 39.0 %  
Case Mix Index (CMI) ..... 1.2282

### STAFFING:

Total Number of Physicians..... 90  
Percent of Physicians Board  
Certified Specialists ..... 88.9 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 141  
Licensed Practical Nurses ..... 27

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# MILTON MEDICAL CENTER

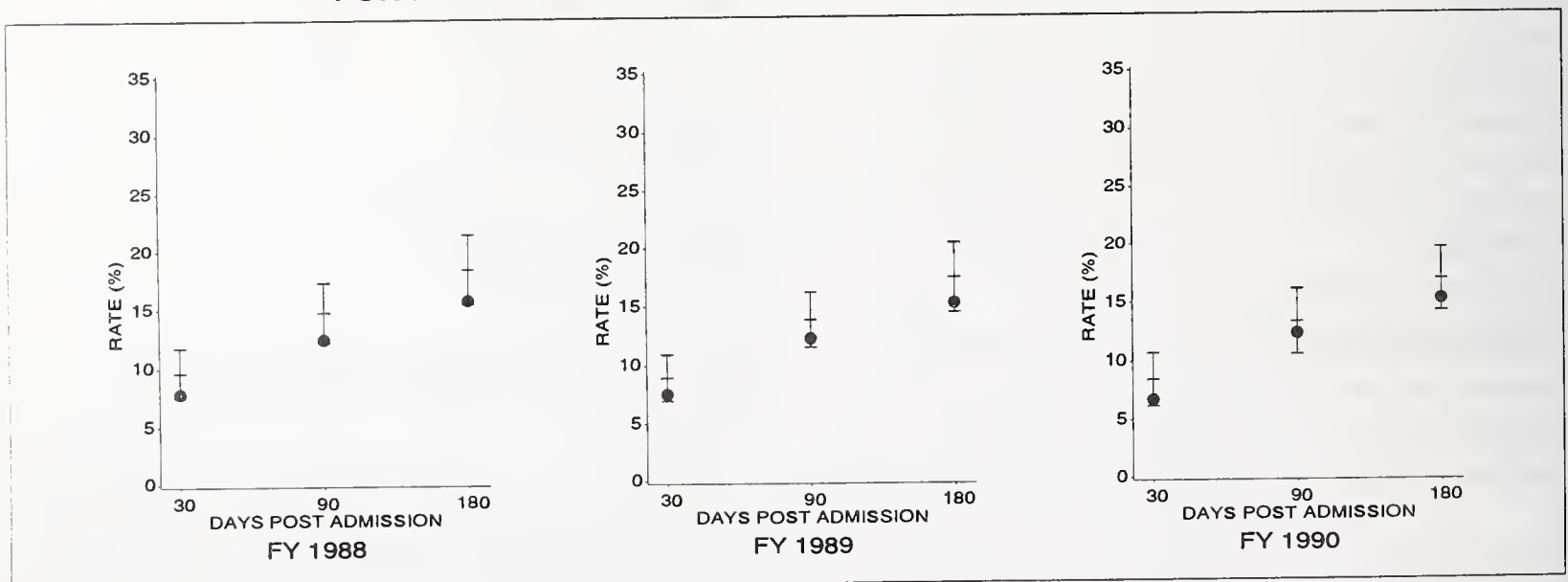
92 HIGHLAND ST  
MILTON, MA 02186  
Medicare Provider Number: 220108

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1615            | 6.7                 | 8.4  | 1.1   | 12.3    | 13.3 | 1.4   | 15.2     | 16.9 | 1.4   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 46              | 13.0                | 26.6 | ----- | 13.0    | 30.3 | ----- | 15.2     | 33.1 | ----- |
| Congestive Heart Failure.....              | 75              | 12.0                | 13.4 | 5.3   | 25.3    | 21.2 | 6.2   | 29.3     | 27.2 | 6.1   |
| Pneumonia/Influenza.....                   | 92              | 13.0                | 17.8 | 7.3   | 20.7    | 23.9 | 8.6   | 23.9     | 27.9 | 9.5   |
| Chronic Obstructive Pulmonary Disease..... | 14              | 0.0                 | 5.1  | ----- | 7.1     | 9.8  | ----- | 14.3     | 13.7 | ----- |
| Transient Cerebral Ischemia.....           | 25              | 0.0                 | 1.6  | ----- | 0.0     | 3.8  | ----- | 4.0      | 6.3  | ----- |
| Stroke.....                                | 45              | 24.4                | 20.2 | ----- | 28.9    | 26.3 | ----- | 37.8     | 29.9 | ----- |
| Hip Fracture.....                          | 42              | 7.1                 | 4.7  | ----- | 7.1     | 8.6  | ----- | 9.5      | 11.4 | ----- |
| Sepsis.....                                | 21              | 0.0                 | 20.5 | ----- | 9.5     | 27.7 | ----- | 19.0     | 32.4 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 13              | 0.0                 | 1.7  | ----- | 7.7     | 3.5  | ----- | 7.7      | 5.7  | ----- |
| Carotid Endarterectomy.....                | 1               | 0.0                 | 0.5  | ----- | 0.0     | 1.0  | ----- | 0.0      | 1.7  | ----- |
| Hip Replacement/Reconstruction.....        | 18              | 5.6                 | 3.8  | ----- | 5.6     | 7.4  | ----- | 11.1     | 10.0 | ----- |
| Open Reduction of Hip Fracture.....        | 27              | 3.7                 | 3.9  | ----- | 3.7     | 7.2  | ----- | 3.7      | 9.7  | ----- |
| Prostatectomy.....                         | 49              | 0.0                 | 1.0  | ----- | 0.0     | 2.4  | ----- | 0.0      | 4.2  | ----- |
| Cholecystectomy.....                       | 22              | 0.0                 | 1.6  | ----- | 0.0     | 2.6  | ----- | 0.0      | 3.3  | ----- |
| Hysterectomy.....                          | 19              | 5.3                 | 0.6  | ----- | 5.3     | 1.4  | ----- | 5.3      | 2.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



**MILTON MEDICAL CENTER**  
Medicare Provider Number: 220108

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 76.9 years  
Proportion female..... 63.0 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 38.3 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 16.1 %  
Admitted for emergency..... 59.2 %

**COMORBIDITIES:**

Cancer..... 8.7 %  
Chronic cardiovascular disease..... 34.7 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 1.9 %  
Chronic pulmonary disease..... 12.8 %  
Cerebrovascular degeneration..... 4.8 %  
Diabetes mellitus..... 6.1 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 60.1 %  
State ..... 37.9 %  
Outside State ..... 2.0 %  
Total ..... 100.0 %

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 9.8 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 161  
Occupancy Rate ..... 62.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 49.7 %  
Case Mix Index (CMI) ..... 1.1558

**STAFFING:**

Total Number of Physicians..... 82  
Percent of Physicians Board  
Certified Specialists..... 82.9 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 110  
Licensed Practical Nurses ..... 20

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MORTON HOSPITAL & MEDICAL CENTER

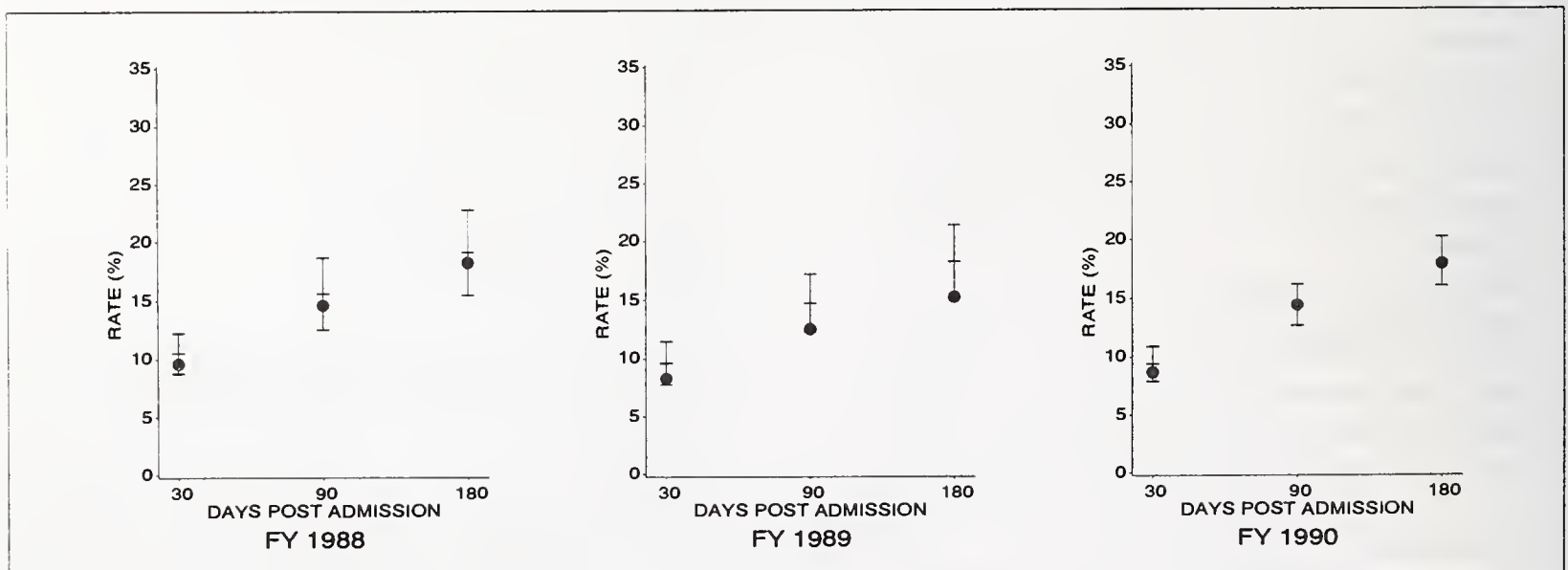
88 WASHINGTON ST  
TAUNTON, MA 02780  
Medicare Provider Number: 220073

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1718            | 8.7                 | 9.4  | 0.7  | 14.4    | 14.4 | 0.9  | 17.9     | 18.1 | 1.0  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 88              | 25.0                | 21.2 | 6.4  | 38.6    | 25.5 | 8.6  | 40.9     | 28.9 | 8.5  |
| Congestive Heart Failure.....              | 116             | 12.9                | 14.2 | 4.5  | 19.8    | 22.7 | 6.4  | 30.2     | 28.6 | 6.4  |
| Pneumonia/Influenza.....                   | 104             | 13.5                | 18.4 | 5.9  | 21.2    | 25.3 | 5.3  | 25.0     | 29.6 | 5.4  |
| Chronic Obstructive Pulmonary Disease..... | 12              | 33.3                | 11.4 | ---- | 41.7    | 18.8 | ---- | 58.3     | 23.5 | ---- |
| Transient Cerebral Ischemia.....           | 27              | 0.0                 | 1.8  | ---- | 0.0     | 4.1  | ---- | 3.7      | 6.8  | ---- |
| Stroke.....                                | 75              | 12.0                | 19.7 | 6.1  | 26.7    | 27.4 | 5.2  | 32.0     | 31.7 | 5.4  |
| Hip Fracture.....                          | 39              | 0.0                 | 6.4  | ---- | 7.7     | 11.5 | ---- | 15.4     | 15.0 | ---- |
| Sepsis.....                                | 14              | 35.7                | 21.8 | ---- | 50.0    | 30.4 | ---- | 64.3     | 35.8 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 10              | 0.0                 | 4.8  | ---- | 10.0    | 8.1  | ---- | 10.0     | 10.9 | ---- |
| Carotid Endarterectomy.....                | 1               | 0.0                 | 0.5  | ---- | 0.0     | 1.1  | ---- | 0.0      | 1.7  | ---- |
| Hip Replacement/Reconstruction.....        | 31              | 0.0                 | 4.1  | ---- | 3.2     | 7.8  | ---- | 6.5      | 10.6 | ---- |
| Open Reduction of Hip Fracture.....        | 19              | 0.0                 | 6.0  | ---- | 10.5    | 11.1 | ---- | 21.1     | 14.5 | ---- |
| Prostatectomy.....                         | 85              | 0.0                 | 1.2  | 1.5  | 1.2     | 2.6  | 2.4  | 1.2      | 4.4  | 3.8  |
| Cholecystectomy.....                       | 31              | 3.2                 | 2.2  | ---- | 6.5     | 4.0  | ---- | 6.5      | 5.2  | ---- |
| Hysterectomy.....                          | 10              | 0.0                 | 0.6  | ---- | 0.0     | 1.3  | ---- | 0.0      | 2.0  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# MORTON HOSPITAL & MEDICAL CENTER

Medicare Provider Number: 220073

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 75.0 years |
| Proportion female.....        | 54.7 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 22.2 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 13.6 % |
| Admitted for emergency.....                    | 74.0 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 7.3 %  |
| Chronic cardiovascular disease..... | 39.2 % |
| Chronic liver disease.....          | 1.4 %  |
| Chronic renal disease.....          | 3.5 %  |
| Chronic pulmonary disease.....      | 21.0 % |
| Cerebrovascular degeneration.....   | 4.2 %  |
| Diabetes mellitus.....              | 11.8 % |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 91.8%  |
| State .....         | 7.3%   |
| Outside State ..... | 0.9%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |           |
|----------------|-----------|
| Hospital ..... | 13.5 Days |
| State .....    | 10.1 Days |
| National ..... | 8.6 Days  |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 198                 |
| Occupancy Rate .....       | 74.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 38.8 %              |
| Case Mix Index (CMI) ..... | 1.2086              |

### STAFFING:

|                                                           |        |
|-----------------------------------------------------------|--------|
| Total Number of Physicians.....                           | 84     |
| Percent of Physicians Board<br>Certified Specialists..... | 72.6 % |
| Medical Residents/Interns .....                           | 0      |
| Registered Nurses.....                                    | 138    |
| Licensed Practical Nurses .....                           | 56     |

\*\* Except for CMI

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\* Not used in calculating mortality rates

# MT AUBURN HOSPITAL

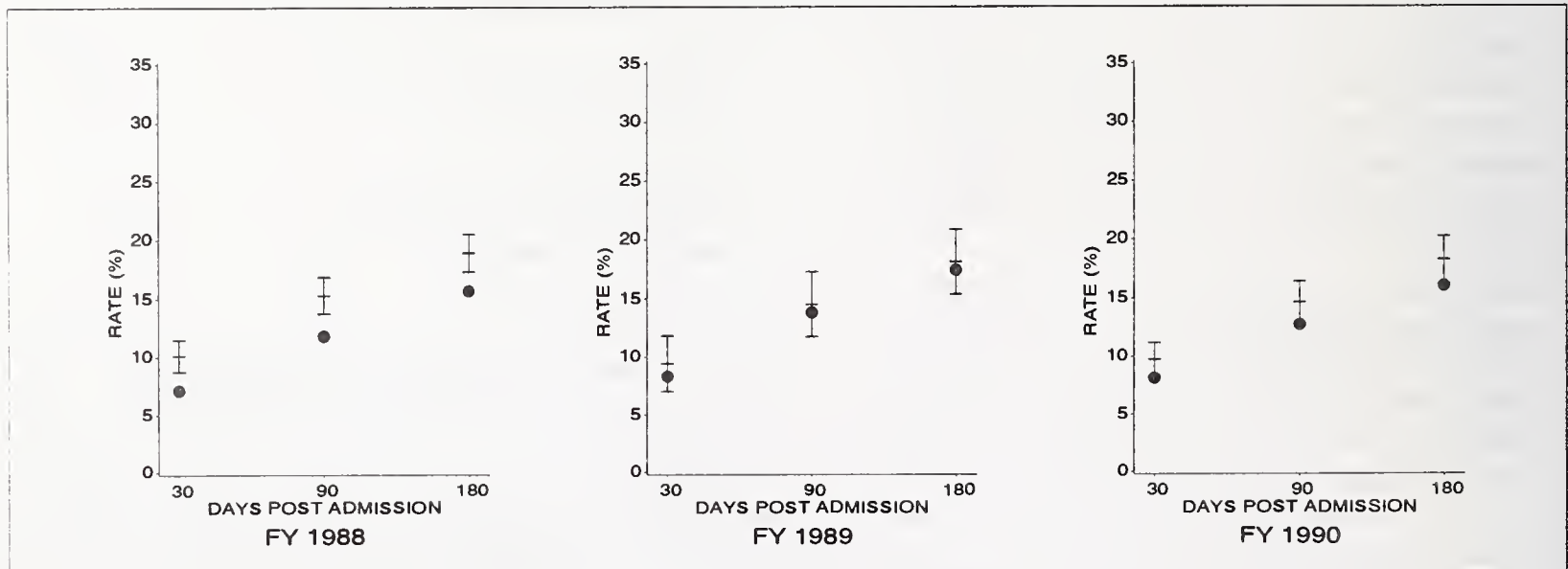
330 MT AUBURN ST  
CAMBRIDGE, MA 02138  
Medicare Provider Number: 220002

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2838            | 8.1                 | 9.7  | 0.7   | 12.7    | 14.6 | 0.9   | 16.0     | 18.2 | 1.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 152             | 19.1                | 24.2 | 5.9   | 21.1    | 28.4 | 6.5   | 25.0     | 31.6 | 6.7   |
| Congestive Heart Failure.....              | 128             | 17.2                | 16.1 | 3.4   | 24.2    | 25.7 | 4.4   | 34.4     | 32.4 | 4.5   |
| Pneumonia/Influenza.....                   | 134             | 17.2                | 16.0 | 3.7   | 22.4    | 22.0 | 3.7   | 26.1     | 25.9 | 4.0   |
| Chronic Obstructive Pulmonary Disease..... | 31              | 3.2                 | 7.0  | ----- | 6.5     | 11.8 | ----- | 16.1     | 15.9 | ----- |
| Transient Cerebral Ischemia.....           | 30              | 0.0                 | 1.4  | ----- | 3.3     | 3.2  | ----- | 3.3      | 5.4  | ----- |
| Stroke.....                                | 94              | 18.1                | 20.4 | 4.3   | 33.0    | 28.3 | 5.7   | 36.2     | 32.2 | 5.1   |
| Hip Fracture.....                          | 76              | 7.9                 | 7.8  | 3.5   | 11.8    | 13.4 | 4.3   | 18.4     | 17.2 | 5.3   |
| Sepsis.....                                | 26              | 38.5                | 29.0 | ----- | 46.2    | 37.7 | ----- | 53.8     | 41.9 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 37              | 2.7                 | 3.2  | ----- | 2.7     | 4.3  | ----- | 2.7      | 5.3  | ----- |
| Coronary Artery Bypass Graft.....          | 58              | 1.7                 | 8.3  | 4.6   | 3.4     | 12.1 | 5.9   | 3.4      | 13.4 | 6.1   |
| Initial Pacemaker Insertion.....           | 22              | 0.0                 | 3.5  | ----- | 0.0     | 6.9  | ----- | 4.5      | 10.1 | ----- |
| Carotid Endarterectomy.....                | 13              | 7.7                 | 1.7  | ----- | 7.7     | 3.0  | ----- | 7.7      | 4.1  | ----- |
| Hip Replacement/Reconstruction.....        | 49              | 2.0                 | 3.1  | ----- | 6.1     | 5.7  | ----- | 10.2     | 7.7  | ----- |
| Open Reduction of Hip Fracture.....        | 44              | 6.8                 | 6.8  | ----- | 6.8     | 12.1 | ----- | 13.6     | 16.0 | ----- |
| Prostatectomy.....                         | 90              | 0.0                 | 1.2  | 1.6   | 1.1     | 2.5  | 2.5   | 2.2      | 4.1  | 3.4   |
| Cholecystectomy.....                       | 32              | 0.0                 | 3.1  | ----- | 0.0     | 5.3  | ----- | 0.0      | 6.7  | ----- |
| Hysterectomy.....                          | 16              | 0.0                 | 1.5  | ----- | 0.0     | 3.3  | ----- | 0.0      | 4.8  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



**MT AUBURN HOSPITAL**  
Medicare Provider Number: 220002

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 76.6 years  
Proportion female..... 59.4 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 24.7 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 19.0 %  
Admitted for emergency..... 70.5 %

**COMORBIDITIES:**

Cancer..... 7.4 %  
Chronic cardiovascular disease..... 45.3 %  
Chronic liver disease..... 0.9 %  
Chronic renal disease..... 3.8 %  
Chronic pulmonary disease..... 11.1 %  
Cerebrovascular degeneration..... 5.6 %  
Diabetes mellitus..... 5.4 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City..... 83.7%  
State ..... 12.9%  
Outside State ..... 3.4%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 9.5 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 290  
Occupancy Rate ..... 75.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 38.6 %  
Case Mix Index (CMI) ..... 1.3331

**STAFFING:**

Total Number of Physicians..... 230  
Percent of Physicians Board  
Certified Specialists..... 89.1 %  
Medical Residents/Interns ..... 47  
Registered Nurses..... 367  
Licensed Practical Nurses ..... 29

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# NANTUCKET COTTAGE HOSPITAL

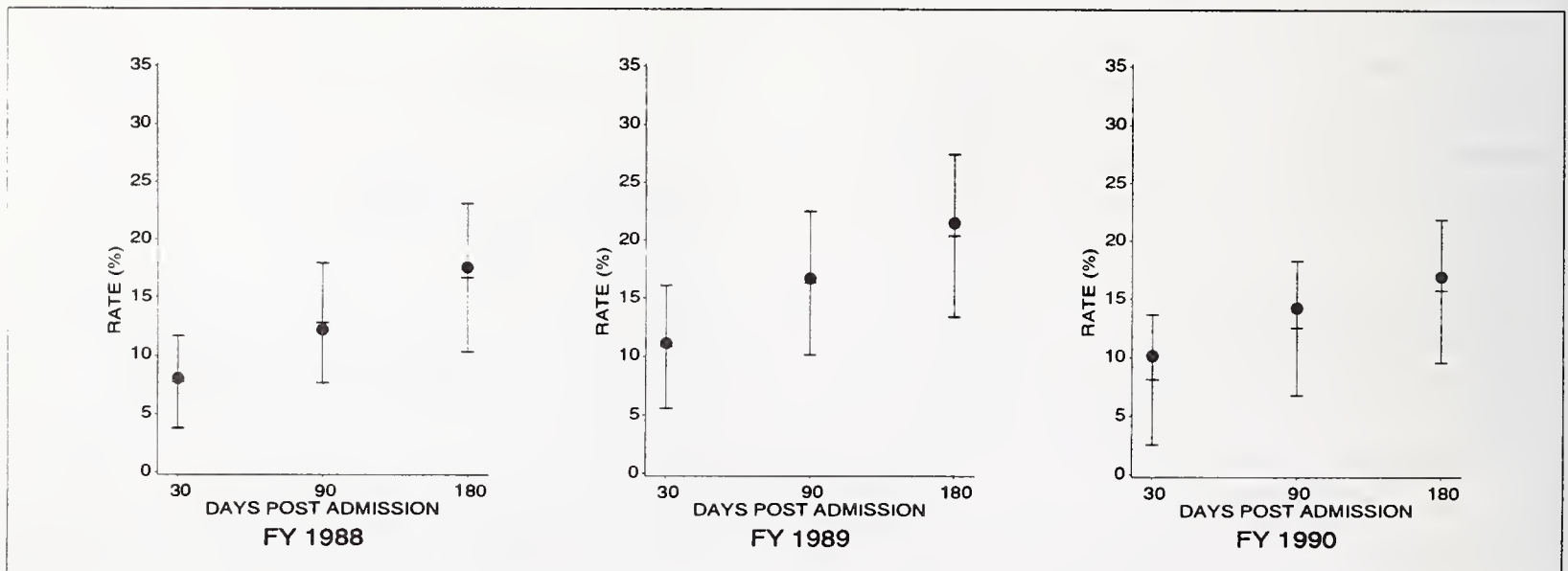
S PROSPECT ST  
NANTUCKET, MA 02554  
Medicare Provider Number: 220081

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 148             | 10.1                | 8.1  | 2.8   | 14.2    | 12.5 | 2.9   | 16.9     | 15.7 | 3.1   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 6               | 16.7                | 30.7 | ----- | 16.7    | 33.2 | ----- | 33.3     | 35.9 | ----- |
| Congestive Heart Failure.....              | 9               | 33.3                | 17.1 | ----- | 44.4    | 26.8 | ----- | 44.4     | 33.6 | ----- |
| Pneumonia/Influenza.....                   | 9               | 11.1                | 17.7 | ----- | 11.1    | 24.3 | ----- | 11.1     | 28.0 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 5               | 0.0                 | 12.4 | ----- | 0.0     | 21.8 | ----- | 0.0      | 28.2 | ----- |
| Transient Cerebral Ischemia.....           | 2               | 0.0                 | 1.3  | ----- | 0.0     | 3.5  | ----- | 0.0      | 6.4  | ----- |
| Stroke.....                                | 4               | 75.0                | 23.8 | ----- | 75.0    | 29.4 | ----- | 75.0     | 33.2 | ----- |
| Hip Fracture.....                          | 6               | 0.0                 | 5.3  | ----- | 0.0     | 9.6  | ----- | 0.0      | 12.9 | ----- |
| Sepsis.....                                | 1               | 0.0                 | 22.7 | ----- | 0.0     | 26.7 | ----- | 0.0      | 31.3 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 2               | 0.0                 | 4.4  | ----- | 0.0     | 8.5  | ----- | 0.0      | 12.1 | ----- |
| Open Reduction of Hip Fracture.....        | 4               | 0.0                 | 5.8  | ----- | 0.0     | 10.7 | ----- | 0.0      | 14.3 | ----- |
| Prostatectomy.....                         | 5               | 0.0                 | 0.4  | ----- | 0.0     | 1.1  | ----- | 0.0      | 1.9  | ----- |
| Cholecystectomy.....                       | 1               | 0.0                 | 0.6  | ----- | 0.0     | 1.3  | ----- | 0.0      | 2.0  | ----- |
| Hysterectomy.....                          | 0               |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# NANTUCKET COTTAGE HOSPITAL

Medicare Provider Number: 220081

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.6 years  
Proportion female..... 56.1 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 38.5 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 20.9 %  
Admitted for emergency..... 10.1 %

### COMORBIDITIES:

Cancer..... 6.1 %  
Chronic cardiovascular disease..... 23.0 %  
Chronic liver disease..... 0.0 %  
Chronic renal disease..... 3.4 %  
Chronic pulmonary disease..... 9.5 %  
Cerebrovascular degeneration..... 2.0 %  
Diabetes mellitus..... 6.1 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 71.7%  
State ..... 7.8%  
Outside State ..... 20.5%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 6.7 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 20  
Occupancy Rate ..... 26.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 37.1 %  
Case Mix Index (CMI) ..... 0.9635

### STAFFING:

Total Number of Physicians..... 8  
Percent of Physicians Board  
Certified Specialists..... 75.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 26  
Licensed Practical Nurses ..... 4

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation ..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# NAUKEAG HOSPITAL CORPORATION

216 LAKE RD  
ASHBURNHAM, MA 01430  
Medicare Provider Number: 220173

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 11                 | 0.0                 | 0.5  | ----- | 0.0     | 1.3  | ----- | 0.0      | 2.3  | ----- |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Congestive Heart Failure.....              | 0                  |                     |      |       |         |      |       |          |      |       |
| Pneumonia/Influenza.....                   | 0                  |                     |      |       |         |      |       |          |      |       |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |       |         |      |       |          |      |       |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Stroke.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Fracture.....                          | 0                  |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0                  |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 0                  |                     |      |       |         |      |       |          |      |       |
| Hysterectomy.....                          | 0                  |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES

No Graphs are presented when the standard deviation  
was not computed for one or more of the three fiscal years,  
(1988, 1989, or 1990)



# NAUKEAG HOSPITAL CORPORATION

Medicare Provider Number: 220173

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 52.3 years |
| Proportion female.....        | 36.4 %     |

### ADMISSION SOURCES/TYPES:

|                                                |       |
|------------------------------------------------|-------|
| Referred by personal or HMO physician.....     | 9.1 % |
| Transferred from skilled nursing facility..... | 0.0 % |
| Admitted for elective procedure.....           | 0.0 % |
| Admitted for emergency.....                    | 0.0 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 0.0 %  |
| Chronic cardiovascular disease..... | 18.2 % |
| Chronic liver disease.....          | 0.0 %  |
| Chronic renal disease.....          | 0.0 %  |
| Chronic pulmonary disease.....      | 0.0 %  |
| Cerebrovascular degeneration.....   | 18.2 % |
| Diabetes mellitus.....              | 0.0 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 50.0%  |
| State .....         | 28.6%  |
| Outside State ..... | 21.4%  |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |           |
|----------------|-----------|
| Hospital ..... | 9.9 Days  |
| State .....    | 10.1 Days |
| National ..... | 8.6 Days  |

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 26                  |
| Ownership/Control.....     | Private, For Profit |
| Case Mix Index (CMI) ..... | 0.5510              |

### STAFFING:

|                                 |   |
|---------------------------------|---|
| Medical Residents/Interns ..... | 3 |
| Registered Nurses.....          | 9 |
| Licensed Practical Nurses ..... | 1 |

### SPECIALTY SERVICES:

|                           |     |
|---------------------------|-----|
| Burn Unit .....           | No  |
| Coronary Care Unit .....  | No  |
| Hospice Care .....        | No  |
| Intensive Care Unit ..... | Yes |
| Organ Transplant .....    | No  |
| Trauma Center .....       | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | Yes |
| Rehabilitation.....       | Yes |
| Psychiatric .....         | Yes |
| Medicare Swing Beds ..... | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates

# NEW ENGLAND BAPTIST HOSPITAL

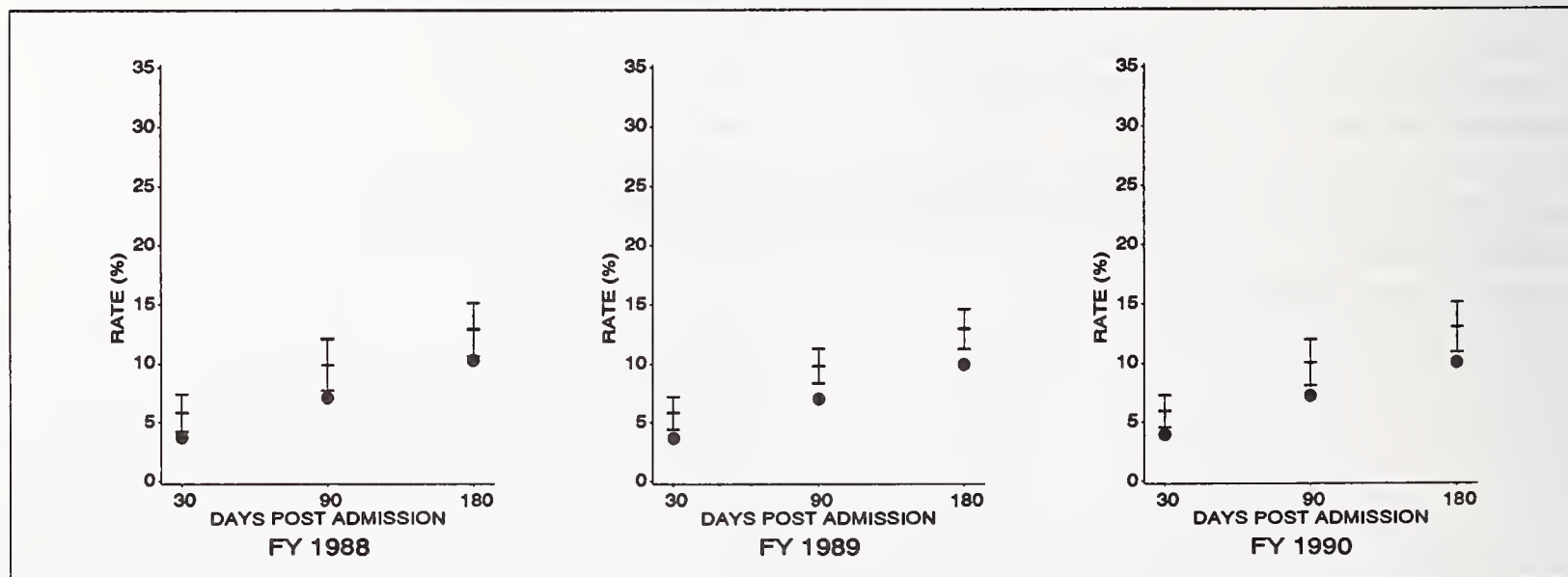
91 PARKER HILL AVE  
BOSTON, MA 02120  
Medicare Provider Number: 220088

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1849               | 3.9                 | 5.9  | 0.7   | 7.2     | 10.0 | 1.0   | 10.0     | 13.0 | 1.1   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 19                 | 15.8                | 18.3 | ----- | 15.8    | 21.4 | ----- | 15.8     | 24.4 | ----- |
| Congestive Heart Failure.....              | 60                 | 10.0                | 16.4 | 7.8   | 23.3    | 26.0 | 6.6   | 30.0     | 32.6 | 6.4   |
| Pneumonia/Influenza.....                   | 34                 | 20.6                | 16.5 | ----- | 20.6    | 23.3 | ----- | 20.6     | 27.8 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 8                  | 12.5                | 10.3 | ----- | 12.5    | 19.1 | ----- | 12.5     | 25.1 | ----- |
| Transient Cerebral Ischemia.....           | 12                 | 0.0                 | 2.8  | ----- | 0.0     | 6.0  | ----- | 8.3      | 8.8  | ----- |
| Stroke.....                                | 19                 | 10.5                | 23.5 | ----- | 10.5    | 32.4 | ----- | 10.5     | 37.9 | ----- |
| Hip Fracture.....                          | 30                 | 0.0                 | 6.2  | ----- | 6.7     | 11.5 | ----- | 10.0     | 15.4 | ----- |
| Sepsis.....                                | 11                 | 9.1                 | 25.6 | ----- | 27.3    | 36.1 | ----- | 27.3     | 41.5 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 16                 | 6.3                 | 2.8  | ----- | 12.5    | 6.2  | ----- | 12.5     | 9.5  | ----- |
| Carotid Endarterectomy.....                | 7                  | 0.0                 | 1.4  | ----- | 0.0     | 2.4  | ----- | 0.0      | 3.6  | ----- |
| Hip Replacement/Reconstruction.....        | 248                | 0.4                 | 0.9  | 0.8   | 0.8     | 1.8  | 1.2   | 1.6      | 2.5  | 1.4   |
| Open Reduction of Hip Fracture.....        | 16                 | 0.0                 | 5.1  | ----- | 6.3     | 10.2 | ----- | 12.5     | 14.5 | ----- |
| Prostatectomy.....                         | 23                 | 0.0                 | 0.8  | ----- | 0.0     | 1.9  | ----- | 0.0      | 3.4  | ----- |
| Cholecystectomy.....                       | 22                 | 0.0                 | 2.7  | ----- | 4.5     | 5.6  | ----- | 9.1      | 8.3  | ----- |
| Hysterectomy.....                          | 20                 | 0.0                 | 0.7  | ----- | 0.0     | 1.6  | ----- | 0.0      | 2.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# NEW ENGLAND BAPTIST HOSPITAL

Medicare Provider Number: 220088

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 72.3 years |
| Proportion female.....        | 60.4 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 72.4 % |
| Transferred from skilled nursing facility..... | 3.0 %  |
| Admitted for elective procedure.....           | 53.7 % |
| Admitted for emergency.....                    | 2.9 %  |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 8.2 %  |
| Chronic cardiovascular disease..... | 30.3 % |
| Chronic liver disease.....          | 1.1 %  |
| Chronic renal disease.....          | 6.0 %  |
| Chronic pulmonary disease.....      | 10.9 % |
| Cerebrovascular degeneration.....   | 3.2 %  |
| Diabetes mellitus.....              | 5.1 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 20.7%  |
| State .....         | 65.9%  |
| Outside State ..... | 13.4%  |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |           |
|----------------|-----------|
| Hospital ..... | 10.3 Days |
| State .....    | 10.1 Days |
| National ..... | 8.6 Days  |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 219                 |
| Occupancy Rate .....       | 74.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 40.0 %              |
| Case Mix Index (CMI) ..... | 1.5302              |

### STAFFING:

|                                                           |        |
|-----------------------------------------------------------|--------|
| Total Number of Physicians.....                           | 139    |
| Percent of Physicians Board<br>Certified Specialists..... | 92.1 % |
| Medical Residents/Interns .....                           | 7      |
| Registered Nurses.....                                    | 236    |
| Licensed Practical Nurses .....                           | 3      |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | Yes |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates



# NEW ENGLAND DEACONESS HOSPITAL

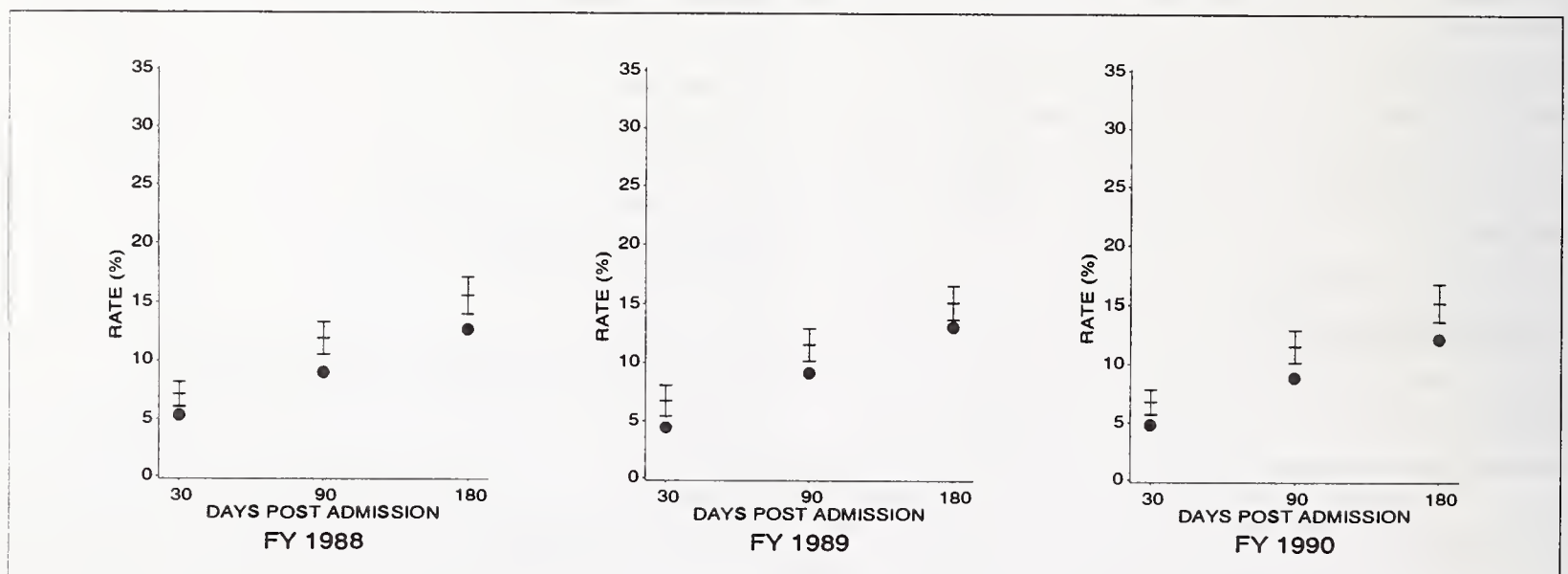
185 PILGRIM RD  
BOSTON, MA 02215  
Medicare Provider Number: 220118

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2490               | 4.8                 | 6.7  | 0.5   | 8.8     | 11.5 | 0.7   | 12.1     | 15.2 | 0.8   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 44                 | 34.1                | 22.9 | ----- | 38.6    | 26.6 | ----- | 40.9     | 29.9 | ----- |
| Congestive Heart Failure.....              | 70                 | 12.9                | 15.9 | 8.7   | 27.1    | 26.0 | 10.0  | 31.4     | 33.0 | 7.5   |
| Pneumonia/Influenza.....                   | 35                 | 11.4                | 13.4 | ----- | 20.0    | 18.6 | ----- | 28.6     | 22.0 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 11                 | 0.0                 | 7.3  | ----- | 9.1     | 13.4 | ----- | 9.1      | 17.8 | ----- |
| Transient Cerebral Ischemia.....           | 6                  | 0.0                 | 1.6  | ----- | 0.0     | 3.8  | ----- | 0.0      | 6.4  | ----- |
| Stroke.....                                | 19                 | 5.3                 | 16.6 | ----- | 5.3     | 24.1 | ----- | 10.5     | 28.0 | ----- |
| Hip Fracture.....                          | 13                 | 0.0                 | 10.5 | ----- | 7.7     | 18.2 | ----- | 7.7      | 22.7 | ----- |
| Sepsis.....                                | 17                 | 17.6                | 22.7 | ----- | 35.3    | 32.4 | ----- | 35.3     | 37.5 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 122                | 2.5                 | 2.0  | 1.3   | 2.5     | 3.3  | 2.1   | 5.7      | 4.6  | 2.2   |
| Coronary Artery Bypass Graft.....          | 138                | 6.5                 | 6.2  | 3.4   | 7.2     | 9.3  | 3.8   | 8.0      | 10.6 | 4.5   |
| Initial Pacemaker Insertion.....           | 5                  | 20.0                | 4.7  | ----- | 20.0    | 9.7  | ----- | 20.0     | 15.0 | ----- |
| Carotid Endarterectomy.....                | 20                 | 0.0                 | 1.3  | ----- | 0.0     | 2.5  | ----- | 5.0      | 3.8  | ----- |
| Hip Replacement/Reconstruction.....        | 18                 | 0.0                 | 5.0  | ----- | 5.6     | 9.2  | ----- | 11.1     | 11.9 | ----- |
| Open Reduction of Hip Fracture.....        | 4                  | 0.0                 | 8.5  | ----- | 0.0     | 15.8 | ----- | 0.0      | 20.5 | ----- |
| Prostatectomy.....                         | 56                 | 0.0                 | 0.8  | 1.3   | 0.0     | 2.0  | 2.3   | 0.0      | 3.6  | 3.4   |
| Cholecystectomy.....                       | 33                 | 0.0                 | 4.2  | ----- | 3.0     | 8.8  | ----- | 3.0      | 12.8 | ----- |
| Hysterectomy.....                          | 13                 | 0.0                 | 0.5  | ----- | 0.0     | 1.2  | ----- | 7.7      | 2.0  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# NEW ENGLAND DEACONESS HOSPITAL

Medicare Provider Number: 220118

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 71.0 years  
Proportion female..... 50.6 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 43.7 %  
Transferred from skilled nursing facility..... 0.2 %  
Admitted for elective procedure..... 47.4 %  
Admitted for emergency..... 26.4 %

### COMORBIDITIES:

Cancer..... 8.9 %  
Chronic cardiovascular disease..... 32.9 %  
Chronic liver disease..... 1.5 %  
Chronic renal disease..... 4.9 %  
Chronic pulmonary disease..... 5.5 %  
Cerebrovascular degeneration..... 2.4 %  
Diabetes mellitus..... 25.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 17.0%  
State ..... 68.5%  
Outside State ..... 14.5%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.6 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 392  
Occupancy Rate ..... 80.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 37.8 %  
Case Mix Index (CMI) ..... 1.8438

### STAFFING:

Total Number of Physicians..... 350  
Percent of Physicians Board  
Certified Specialists..... 76.0 %  
Medical Residents/Interns ..... 234  
Registered Nurses..... 600  
Licensed Practical Nurses ..... 12

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# NEW ENGLAND MEDICAL CENTER HOSPITAL

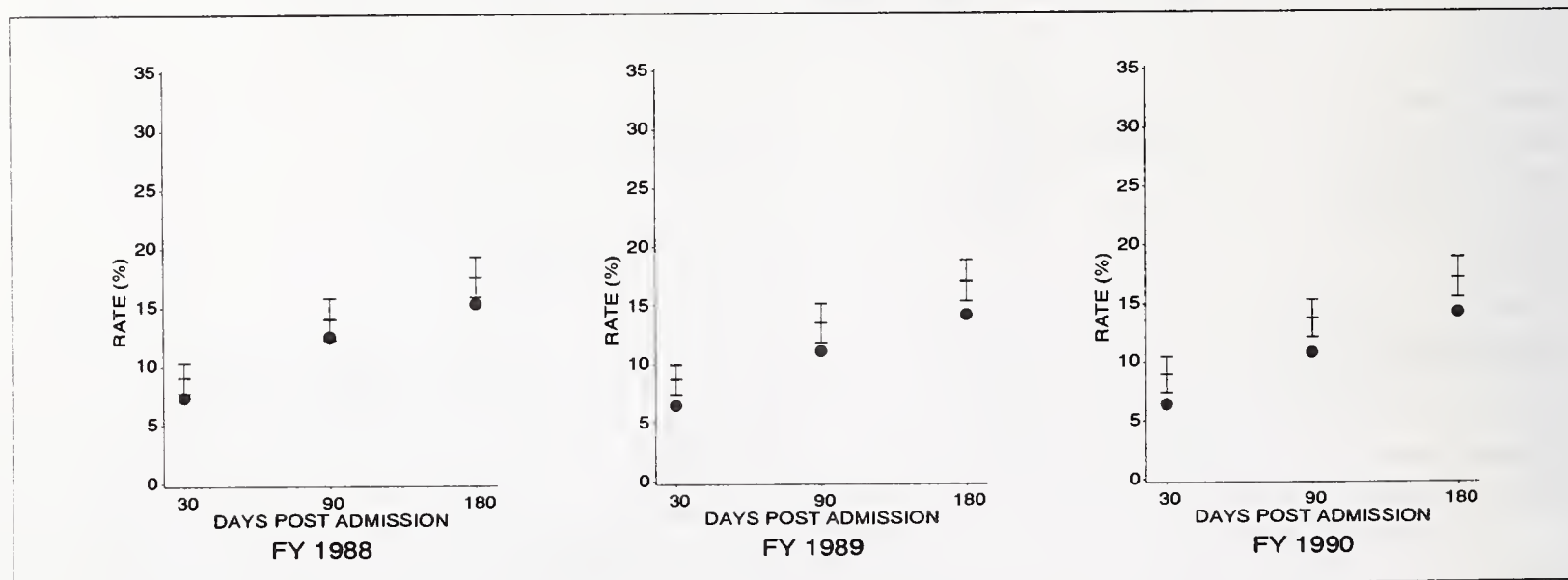
750 WASHINGTON STREET  
BOSTON, MA 02111  
Medicare Provider Number: 220116

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2247            | 6.4                 | 8.9  | 0.8   | 10.8    | 13.7 | 0.8   | 14.2     | 17.2 | 0.9   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 89              | 19.1                | 23.7 | 5.7   | 27.0    | 27.3 | 5.0   | 28.1     | 30.1 | 5.0   |
| Congestive Heart Failure.....              | 55              | 9.1                 | 14.1 | 6.3   | 20.0    | 22.5 | 5.9   | 27.3     | 28.5 | 6.4   |
| Pneumonia/Influenza.....                   | 61              | 16.4                | 18.3 | 6.6   | 26.2    | 25.3 | 5.7   | 31.1     | 29.6 | 6.2   |
| Chronic Obstructive Pulmonary Disease..... | 21              | 0.0                 | 10.8 | ----- | 9.5     | 17.8 | ----- | 19.0     | 23.1 | ----- |
| Transient Cerebral Ischemia.....           | 19              | 0.0                 | 1.3  | ----- | 5.3     | 2.7  | ----- | 5.3      | 4.4  | ----- |
| Stroke.....                                | 55              | 7.3                 | 22.1 | 7.9   | 14.5    | 28.0 | 8.8   | 21.8     | 31.7 | 9.4   |
| Hip Fracture.....                          | 28              | 0.0                 | 6.1  | ----- | 7.1     | 10.7 | ----- | 7.1      | 13.8 | ----- |
| Sepsis.....                                | 6               | 66.7                | 23.3 | ----- | 83.3    | 30.4 | ----- | 83.3     | 35.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 37              | 5.4                 | 3.7  | ----- | 5.4     | 5.4  | ----- | 5.4      | 6.9  | ----- |
| Coronary Artery Bypass Graft.....          | 155             | 1.3                 | 6.2  | 2.9   | 5.2     | 9.3  | 3.2   | 5.2      | 10.6 | 3.4   |
| Initial Pacemaker Insertion.....           | 12              | 0.0                 | 3.4  | ----- | 0.0     | 6.9  | ----- | 8.3      | 9.9  | ----- |
| Carotid Endarterectomy.....                | 25              | 8.0                 | 1.6  | ----- | 8.0     | 2.8  | ----- | 8.0      | 4.1  | ----- |
| Hip Replacement/Reconstruction.....        | 29              | 0.0                 | 2.2  | ----- | 3.4     | 4.1  | ----- | 3.4      | 5.6  | ----- |
| Open Reduction of Hip Fracture.....        | 13              | 0.0                 | 5.9  | ----- | 7.7     | 10.7 | ----- | 7.7      | 13.9 | ----- |
| Prostatectomy.....                         | 37              | 0.0                 | 0.6  | ----- | 0.0     | 1.5  | ----- | 0.0      | 2.7  | ----- |
| Cholecystectomy.....                       | 17              | 0.0                 | 4.1  | ----- | 0.0     | 8.0  | ----- | 0.0      | 11.1 | ----- |
| Hysterectomy.....                          | 20              | 0.0                 | 0.5  | ----- | 0.0     | 1.1  | ----- | 0.0      | 2.0  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# NEW ENGLAND MEDICAL CENTER HOSPITAL

Medicare Provider Number: 220116

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 70.3 years |
| Proportion female.....        | 49.4 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 42.0 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 39.5 % |
| Admitted for emergency.....                    | 34.7 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 10.3 % |
| Chronic cardiovascular disease..... | 42.3 % |
| Chronic liver disease.....          | 1.5 %  |
| Chronic renal disease.....          | 4.8 %  |
| Chronic pulmonary disease.....      | 13.5 % |
| Cerebrovascular degeneration.....   | 2.7 %  |
| Diabetes mellitus.....              | 6.2 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 36.2%  |
| State .....         | 55.7%  |
| Outside State ..... | 8.1%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |           |
|----------------|-----------|
| Hospital ..... | 11.4 Days |
| State .....    | 10.1 Days |
| National ..... | 8.6 Days  |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 464                 |
| Occupancy Rate .....       | 85.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 24.0 %              |
| Case Mix Index (CMI) ..... | 1.7249              |

### STAFFING:

|                                                            |                 |
|------------------------------------------------------------|-----------------|
| Total Number of Physicians.....                            | 989             |
| Percent of Physicians Board<br>Certified Specialists ..... | (Not Available) |
| Medical Residents/Interns .....                            | 267             |
| Registered Nurses.....                                     | 718             |
| Licensed Practical Nurses .....                            | 4               |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | Yes |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | Yes |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation.....       | No  |
| Psychiatric .....         | Yes |
| Medicare Swing Beds ..... | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates

# NEW ENGLAND MEMORIAL HOSPITAL

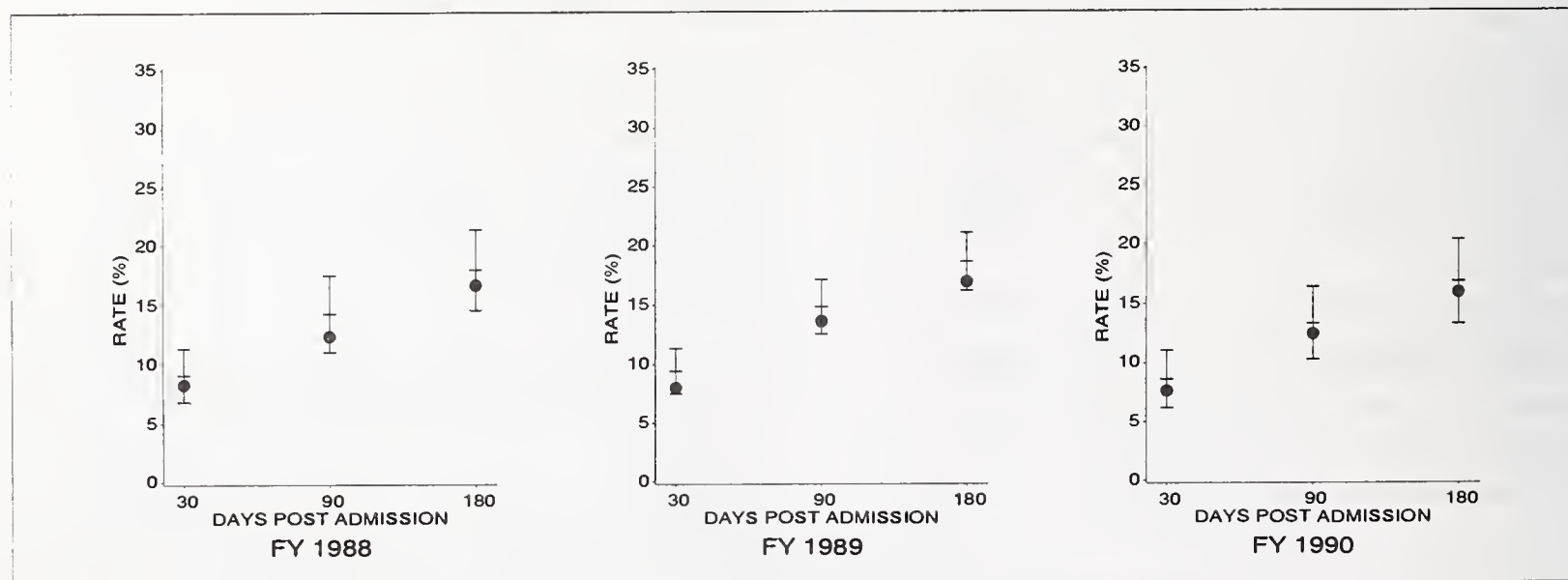
5 WOODLAND RD  
STONEHAM, MA 02180  
Medicare Provider Number: 220064

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1424            | 7.6                 | 8.6  | 1.2   | 12.4    | 13.3 | 1.5   | 15.9     | 16.8 | 1.8   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 43              | 16.3                | 21.9 | ----- | 18.6    | 24.1 | ----- | 18.6     | 26.5 | ----- |
| Congestive Heart Failure.....              | 76              | 14.5                | 14.4 | 4.9   | 22.4    | 22.6 | 5.1   | 32.9     | 28.8 | 7.7   |
| Pneumonia/Influenza.....                   | 96              | 12.5                | 16.7 | 5.8   | 17.7    | 23.1 | 7.8   | 22.9     | 27.3 | 8.2   |
| Chronic Obstructive Pulmonary Disease..... | 21              | 9.5                 | 7.2  | ----- | 14.3    | 12.9 | ----- | 23.8     | 17.5 | ----- |
| Transient Cerebral Ischemia.....           | 15              | 0.0                 | 1.6  | ----- | 0.0     | 3.7  | ----- | 6.7      | 6.2  | ----- |
| Stroke.....                                | 57              | 14.0                | 19.7 | 6.7   | 19.3    | 25.8 | 6.6   | 21.1     | 29.3 | 7.6   |
| Hip Fracture.....                          | 38              | 10.5                | 7.5  | ----- | 18.4    | 13.0 | ----- | 21.1     | 16.7 | ----- |
| Sepsis.....                                | 12              | 16.7                | 21.4 | ----- | 33.3    | 28.4 | ----- | 33.3     | 32.2 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 10              | 0.0                 | 2.7  | ----- | 0.0     | 5.4  | ----- | 10.0     | 8.1  | ----- |
| Carotid Endarterectomy.....                | 6               | 0.0                 | 1.5  | ----- | 0.0     | 2.8  | ----- | 0.0      | 4.2  | ----- |
| Hip Replacement/Reconstruction.....        | 22              | 9.1                 | 3.4  | ----- | 13.6    | 6.3  | ----- | 18.2     | 8.6  | ----- |
| Open Reduction of Hip Fracture.....        | 23              | 4.3                 | 7.6  | ----- | 13.0    | 13.3 | ----- | 17.4     | 17.2 | ----- |
| Prostatectomy.....                         | 35              | 0.0                 | 1.5  | ----- | 2.9     | 3.4  | ----- | 5.7      | 5.8  | ----- |
| Cholecystectomy.....                       | 30              | 3.3                 | 2.7  | ----- | 6.7     | 5.1  | ----- | 10.0     | 7.0  | ----- |
| Hysterectomy.....                          | 8               | 0.0                 | 0.1  | ----- | 0.0     | 0.2  | ----- | 0.0      | 0.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# NEW ENGLAND MEMORIAL HOSPITAL

Medicare Provider Number: 220064

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.8 years  
Proportion female..... 62.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 36.1 %  
Transferred from skilled nursing facility..... 0.3 %  
Admitted for elective procedure..... 15.2 %  
Admitted for emergency..... 9.8 %

### COMORBIDITIES:

Cancer..... 6.5 %  
Chronic cardiovascular disease..... 39.2 %  
Chronic liver disease..... 1.6 %  
Chronic renal disease..... 2.0 %  
Chronic pulmonary disease..... 16.9 %  
Cerebrovascular degeneration..... 5.5 %  
Diabetes mellitus..... 6.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 86.3%  
State..... 11.8%  
Outside State..... 1.9%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 9.1 Days  
State..... 10.1 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 186  
Occupancy Rate..... 79.0 %  
Ownership/Control..... Church  
Medicare Discharges..... 33.3 %  
Case Mix Index (CMI)..... 1.1982

### STAFFING:

Total Number of Physicians..... 137  
Percent of Physicians Board  
Certified Specialists..... 83.2 %  
Medical Residents/Interns..... 0  
Registered Nurses..... 190  
Licensed Practical Nurses..... 10

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... No  
Comprehensive Geriatric..... No  
Hospice Care..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... No  
Other Intensive Care..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# **NEWTON-WELLESLEY HOSPITAL**

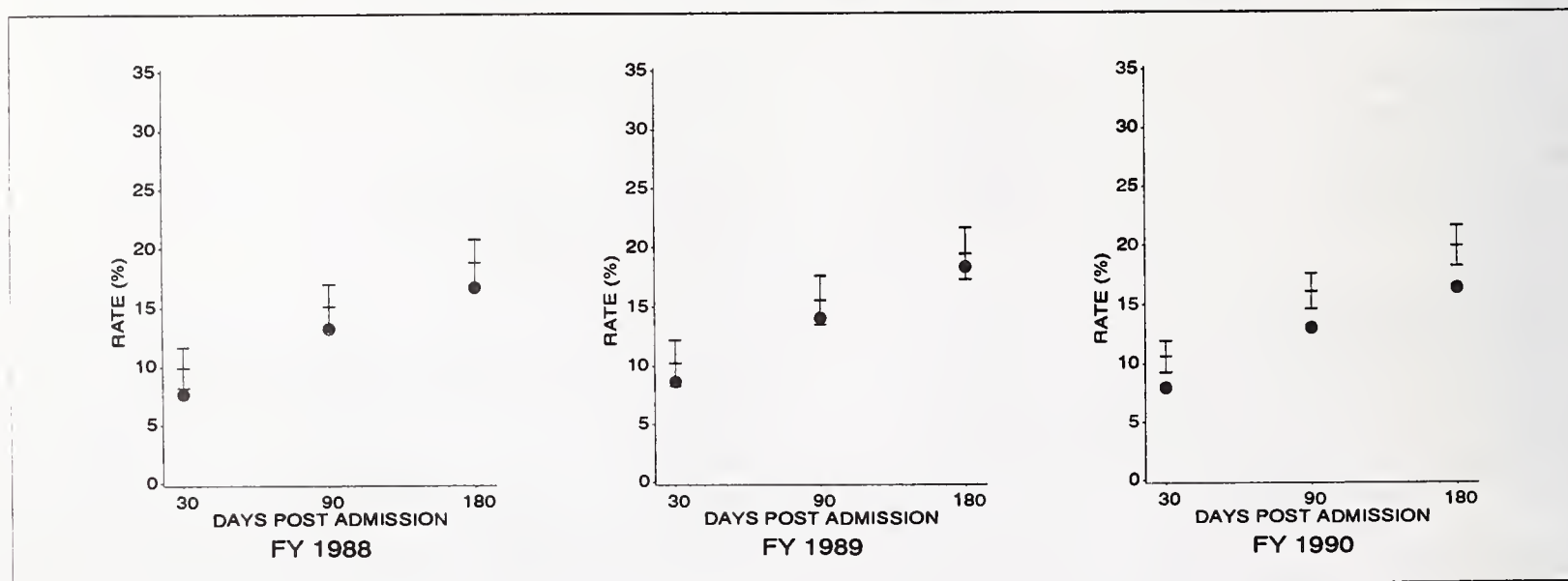
2014 WASHINGTON ST  
NEWTON LOWER FALLS, MA 02162  
Medicare Provider Number: 220101

## **FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2678            | 7.9                 | 10.6 | 0.7   | 13.0    | 16.1 | 0.8   | 16.4     | 19.9 | 0.8   |
| <b>CONDITIONS:</b>                         |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 90              | 23.3                | 30.9 | 6.5   | 34.4    | 35.0 | 5.4   | 40.0     | 38.1 | 5.8   |
| Congestive Heart Failure.....              | 111             | 10.8                | 15.7 | 5.9   | 18.0    | 24.6 | 7.4   | 26.1     | 30.6 | 8.3   |
| Pneumonia/Influenza.....                   | 85              | 10.6                | 18.2 | 6.7   | 14.1    | 24.9 | 6.9   | 17.6     | 28.9 | 7.2   |
| Chronic Obstructive Pulmonary Disease..... | 30              | 3.3                 | 9.6  | ----- | 3.3     | 16.5 | ----- | 3.3      | 21.9 | ----- |
| Transient Cerebral Ischemia.....           | 18              | 0.0                 | 1.5  | ----- | 0.0     | 3.4  | ----- | 5.6      | 5.7  | ----- |
| Stroke.....                                | 100             | 14.0                | 19.2 | 6.2   | 25.0    | 26.0 | 5.4   | 27.0     | 29.9 | 5.2   |
| Hip Fracture.....                          | 93              | 9.7                 | 7.5  | 3.3   | 12.9    | 13.2 | 3.9   | 18.3     | 17.1 | 4.1   |
| Sepsis.....                                | 57              | 15.8                | 25.9 | 8.9   | 22.8    | 32.3 | 9.1   | 28.1     | 37.1 | 9.4   |
| <b>PROCEDURES:</b>                         |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 15              | 0.0                 | 3.7  | ----- | 0.0     | 7.6  | ----- | 0.0      | 11.5 | ----- |
| Carotid Endarterectomy.....                | 7               | 0.0                 | 1.4  | ----- | 0.0     | 2.7  | ----- | 0.0      | 4.2  | ----- |
| Hip Replacement/Reconstruction.....        | 60              | 1.7                 | 3.8  | 3.8   | 1.7     | 7.0  | 5.4   | 5.0      | 9.2  | 6.0   |
| Open Reduction of Hip Fracture.....        | 54              | 11.1                | 6.7  | 5.0   | 14.8    | 12.5 | 6.9   | 20.4     | 16.6 | 8.5   |
| Prostatectomy.....                         | 93              | 2.2                 | 1.3  | 1.8   | 5.4     | 3.0  | 2.8   | 7.5      | 5.1  | 3.9   |
| Cholecystectomy.....                       | 60              | 1.7                 | 2.5  | 2.6   | 3.3     | 4.5  | 3.1   | 5.0      | 6.1  | 3.2   |
| Hysterectomy.....                          | 32              | 0.0                 | 0.3  | ----- | 0.0     | 0.8  | ----- | 0.0      | 1.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## **OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



# NEWTON-WELLESLEY HOSPITAL

Medicare Provider Number: 220101

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.3 years  
Proportion female..... 62.3 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 34.3 %  
Transferred from skilled nursing facility..... 0.2 %  
Admitted for elective procedure..... 21.9 %  
Admitted for emergency..... 62.5 %

### COMORBIDITIES:

Cancer..... 9.2 %  
Chronic cardiovascular disease..... 37.6 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 2.8 %  
Chronic pulmonary disease..... 12.7 %  
Cerebrovascular degeneration..... 6.7 %  
Diabetes mellitus..... 5.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 62.1%  
State ..... 33.6%  
Outside State ..... 4.3%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.1 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 321  
Occupancy Rate ..... 68.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 29.6 %  
Case Mix Index (CMI) ..... 1.3116

### STAFFING:

Total Number of Physicians..... 229  
Percent of Physicians Board  
Certified Specialists..... 66.8 %  
Medical Residents/Interns ..... 23  
Registered Nurses..... 461  
Licensed Practical Nurses..... 12

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

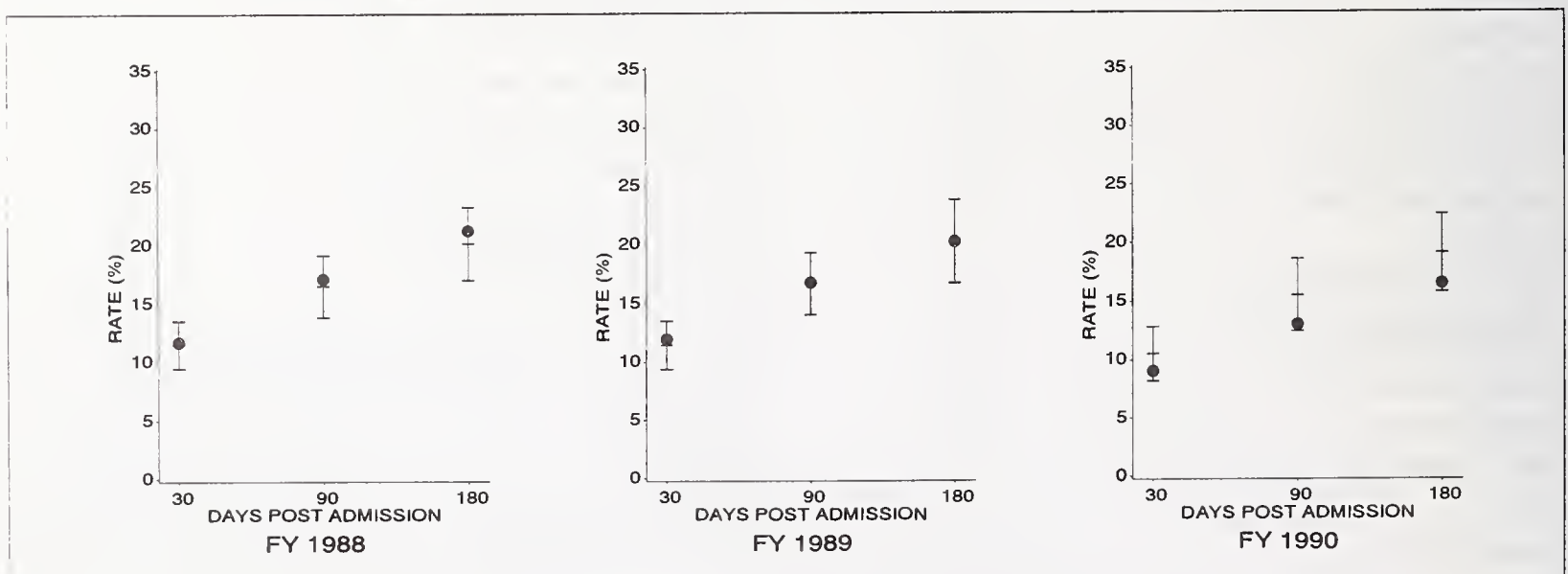
**NOBLE HOSPITAL**  
115 W SILVER ST  
WESTFIELD, MA 01085  
Medicare Provider Number: 220065

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1030            | 9.0                 | 10.5 | 1.2   | 13.0    | 15.5 | 1.5   | 16.5     | 19.1 | 1.7   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 47              | 27.7                | 28.3 | ----- | 27.7    | 31.6 | ----- | 29.8     | 34.8 | ----- |
| Congestive Heart Failure.....              | 64              | 9.4                 | 16.0 | 6.5   | 15.6    | 25.0 | 8.8   | 23.4     | 31.3 | 8.7   |
| Pneumonia/Influenza.....                   | 67              | 13.4                | 17.2 | 9.1   | 17.9    | 23.6 | 8.7   | 22.4     | 28.0 | 8.8   |
| Chronic Obstructive Pulmonary Disease..... | 19              | 5.3                 | 4.4  | ----- | 10.5    | 8.6  | ----- | 15.8     | 12.4 | ----- |
| Transient Cerebral Ischemia.....           | 14              | 0.0                 | 1.6  | ----- | 0.0     | 3.8  | ----- | 0.0      | 6.2  | ----- |
| Stroke.....                                | 24              | 20.8                | 23.2 | ----- | 20.8    | 29.4 | ----- | 25.0     | 33.4 | ----- |
| Hip Fracture.....                          | 38              | 2.6                 | 6.7  | ----- | 7.9     | 12.1 | ----- | 10.5     | 15.8 | ----- |
| Sepsis.....                                | 9               | 33.3                | 33.3 | ----- | 33.3    | 40.8 | ----- | 33.3     | 45.0 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 7               | 0.0                 | 4.2  | ----- | 0.0     | 8.9  | ----- | 14.3     | 13.1 | ----- |
| Carotid Endarterectomy.....                | 3               | 0.0                 | 1.8  | ----- | 0.0     | 3.3  | ----- | 0.0      | 4.9  | ----- |
| Hip Replacement/Reconstruction.....        | 15              | 0.0                 | 3.9  | ----- | 6.7     | 7.1  | ----- | 6.7      | 9.7  | ----- |
| Open Reduction of Hip Fracture.....        | 26              | 3.8                 | 6.2  | ----- | 7.7     | 11.7 | ----- | 11.5     | 15.5 | ----- |
| Prostatectomy.....                         | 23              | 0.0                 | 0.9  | ----- | 0.0     | 2.2  | ----- | 4.3      | 3.8  | ----- |
| Cholecystectomy.....                       | 23              | 0.0                 | 4.1  | ----- | 4.3     | 7.1  | ----- | 8.7      | 8.9  | ----- |
| Hysterectomy.....                          | 6               | 0.0                 | 0.4  | ----- | 0.0     | 0.8  | ----- | 0.0      | 1.3  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**





**NOBLE HOSPITAL**  
Medicare Provider Number: 220065

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 76.6 years  
Proportion female..... 60.1 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 44.0 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 14.9 %  
Admitted for emergency..... 53.7 %

**COMORBIDITIES:**

Cancer..... 7.9 %  
Chronic cardiovascular disease..... 35.7 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 3.1 %  
Chronic pulmonary disease..... 14.5 %  
Cerebrovascular degeneration..... 3.2 %  
Diabetes mellitus..... 7.4 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 90.7%  
State ..... 5.2%  
Outside State ..... 4.1%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 10.2 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 120  
Occupancy Rate ..... 63.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 53.0 %  
Case Mix Index (CMI) ..... 1.1431

**STAFFING:**

Total Number of Physicians..... 58  
Percent of Physicians Board  
Certified Specialists..... 70.7 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 76  
Licensed Practical Nurses..... 30

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# NORTH ADAMS REGIONAL HOSPITAL

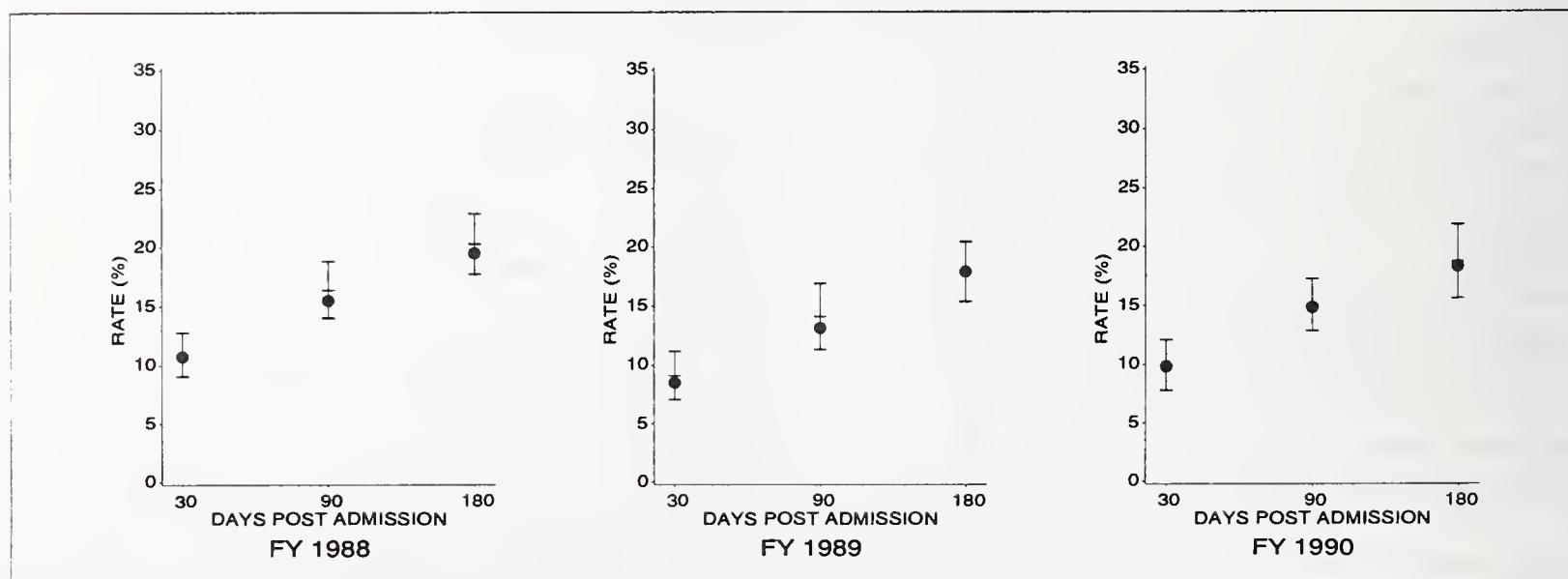
HOSPITAL AVE  
NORTH ADAMS, MA 01247  
Medicare Provider Number: 220051

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1174            | 9.8                 | 9.9  | 1.1   | 14.8    | 15.0 | 1.1   | 18.3     | 18.7 | 1.6   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 42              | 19.0                | 29.9 | ----- | 23.8    | 33.0 | ----- | 28.6     | 35.7 | ----- |
| Congestive Heart Failure.....              | 79              | 13.9                | 15.0 | 4.1   | 24.1    | 24.0 | 5.3   | 31.6     | 30.5 | 6.6   |
| Pneumonia/Influenza.....                   | 81              | 21.0                | 17.4 | 6.1   | 27.2    | 23.7 | 5.6   | 27.2     | 28.0 | 5.9   |
| Chronic Obstructive Pulmonary Disease..... | 19              | 0.0                 | 7.1  | ----- | 5.3     | 12.7 | ----- | 15.8     | 17.0 | ----- |
| Transient Cerebral Ischemia.....           | 19              | 0.0                 | 1.8  | ----- | 0.0     | 4.1  | ----- | 0.0      | 6.6  | ----- |
| Stroke.....                                | 56              | 14.3                | 18.3 | 7.0   | 21.4    | 24.9 | 7.2   | 26.8     | 28.5 | 6.2   |
| Hip Fracture.....                          | 31              | 3.2                 | 8.2  | ----- | 12.9    | 14.5 | ----- | 16.1     | 18.6 | ----- |
| Sepsis.....                                | 12              | 8.3                 | 20.6 | ----- | 16.7    | 28.0 | ----- | 16.7     | 32.4 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 9               | 0.0                 | 10.0 | ----- | 0.0     | 15.6 | ----- | 0.0      | 18.9 | ----- |
| Carotid Endarterectomy.....                | 1               | 0.0                 | 1.0  | ----- | 0.0     | 2.1  | ----- | 0.0      | 3.5  | ----- |
| Hip Replacement/Reconstruction.....        | 19              | 0.0                 | 4.0  | ----- | 5.3     | 7.2  | ----- | 5.3      | 9.4  | ----- |
| Open Reduction of Hip Fracture.....        | 12              | 0.0                 | 6.9  | ----- | 8.3     | 13.5 | ----- | 8.3      | 17.8 | ----- |
| Prostatectomy.....                         | 30              | 0.0                 | 0.7  | ----- | 0.0     | 1.7  | ----- | 3.3      | 2.9  | ----- |
| Cholecystectomy.....                       | 28              | 0.0                 | 1.8  | ----- | 3.6     | 3.4  | ----- | 3.6      | 4.5  | ----- |
| Hysterectomy.....                          | 8               | 0.0                 | 0.1  | ----- | 0.0     | 0.3  | ----- | 12.5     | 0.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# NORTH ADAMS REGIONAL HOSPITAL

Medicare Provider Number: 220051

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.4 years  
Proportion female..... 57.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 35.7 %  
Transferred from skilled nursing facility..... 0.6 %  
Admitted for elective procedure..... 27.8 %  
Admitted for emergency..... 57.8 %

### COMORBIDITIES:

Cancer..... 7.9 %  
Chronic cardiovascular disease..... 39.8 %  
Chronic liver disease..... 1.7 %  
Chronic renal disease..... 2.8 %  
Chronic pulmonary disease..... 14.7 %  
Cerebrovascular degeneration..... 7.2 %  
Diabetes mellitus..... 6.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 91.9%  
State ..... 1.9%  
Outside State ..... 6.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.6 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 133  
Occupancy Rate ..... 62.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 43.7 %  
Case Mix Index (CMI) ..... 1.1785

### STAFFING:

Total Number of Physicians..... 60  
Percent of Physicians Board  
Certified Specialists ..... 90.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 139  
Licensed Practical Nurses..... 34

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# NORWOOD HOSPITAL

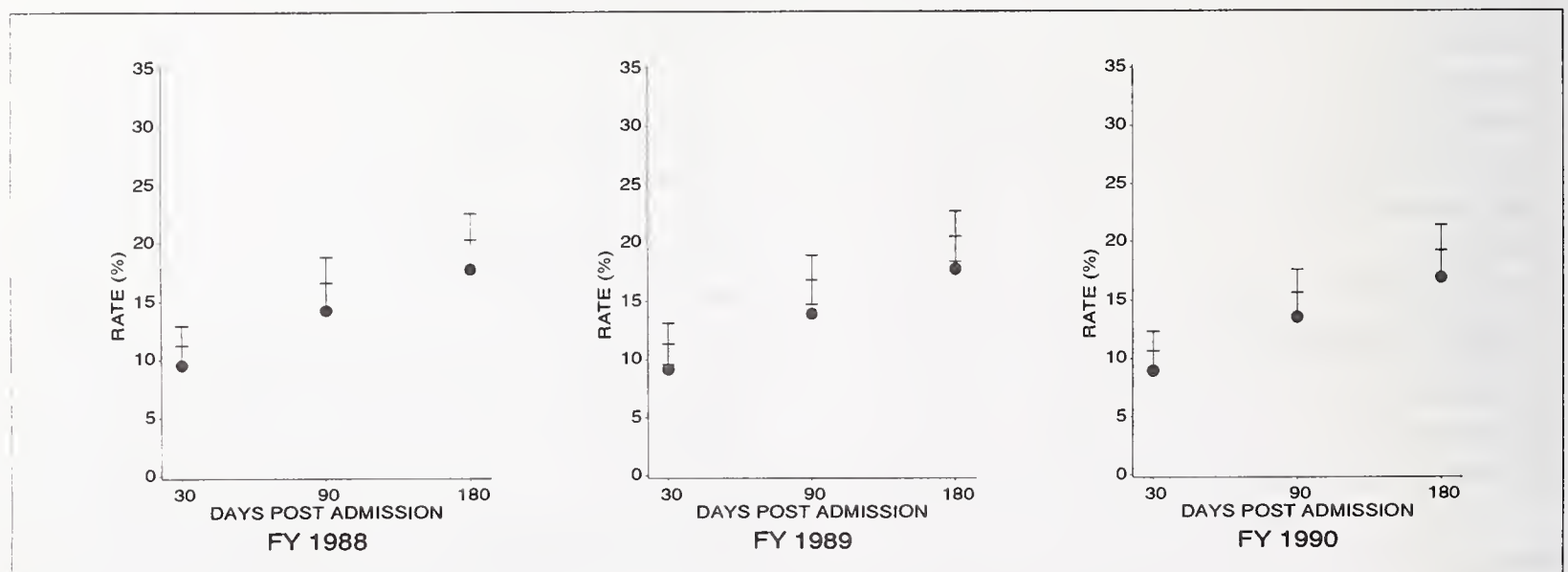
800 WASHINGTON ST  
NORWOOD, MA 02062  
Medicare Provider Number: 220126

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2363               | 8.9                 | 10.6 | 0.9   | 13.5    | 15.6 | 1.0   | 16.9     | 19.2 | 1.1   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 96                 | 20.8                | 23.5 | 5.1   | 29.2    | 26.7 | 5.0   | 31.3     | 29.6 | 4.9   |
| Congestive Heart Failure.....              | 148                | 14.2                | 15.9 | 3.1   | 20.3    | 24.8 | 4.5   | 27.7     | 31.0 | 6.2   |
| Pneumonia/Influenza.....                   | 116                | 19.0                | 20.9 | 4.7   | 24.1    | 28.2 | 6.0   | 28.4     | 32.9 | 7.0   |
| Chronic Obstructive Pulmonary Disease..... | 49                 | 6.1                 | 9.5  | ----- | 16.3    | 15.8 | ----- | 20.4     | 20.6 | ----- |
| Transient Cerebral Ischemia.....           | 51                 | 2.0                 | 2.5  | 2.2   | 3.9     | 5.3  | 3.9   | 5.9      | 8.1  | 5.3   |
| Stroke.....                                | 120                | 20.0                | 22.1 | 6.5   | 23.3    | 29.6 | 8.9   | 29.2     | 33.4 | 9.2   |
| Hip Fracture.....                          | 81                 | 6.2                 | 7.1  | 3.6   | 9.9     | 12.8 | 4.5   | 13.6     | 16.8 | 5.4   |
| Sepsis.....                                | 23                 | 21.7                | 24.7 | ----- | 21.7    | 33.2 | ----- | 21.7     | 37.9 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 26                 | 3.8                 | 4.3  | ----- | 7.7     | 7.6  | ----- | 15.4     | 10.2 | ----- |
| Carotid Endarterectomy.....                | 11                 | 0.0                 | 2.2  | ----- | 0.0     | 4.0  | ----- | 9.1      | 5.7  | ----- |
| Hip Replacement/Reconstruction.....        | 55                 | 3.6                 | 4.3  | 4.1   | 9.1     | 8.0  | 3.9   | 9.1      | 10.7 | 4.8   |
| Open Reduction of Hip Fracture.....        | 49                 | 6.1                 | 6.4  | ----- | 8.2     | 12.2 | ----- | 14.3     | 16.3 | ----- |
| Prostatectomy.....                         | 32                 | 0.0                 | 0.5  | ----- | 0.0     | 1.3  | ----- | 0.0      | 2.3  | ----- |
| Cholecystectomy.....                       | 36                 | 2.8                 | 2.7  | ----- | 2.8     | 4.9  | ----- | 5.6      | 6.3  | ----- |
| Hysterectomy.....                          | 11                 | 0.0                 | 0.2  | ----- | 0.0     | 0.5  | ----- | 0.0      | 0.9  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# NORWOOD HOSPITAL

Medicare Provider Number: 220126

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 76.1 years |
| Proportion female.....        | 60.3 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 22.0 % |
| Transferred from skilled nursing facility..... | 4.9 %  |
| Admitted for elective procedure.....           | 13.1 % |
| Admitted for emergency.....                    | 57.7 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 5.9 %  |
| Chronic cardiovascular disease..... | 44.5 % |
| Chronic liver disease.....          | 0.9 %  |
| Chronic renal disease.....          | 3.9 %  |
| Chronic pulmonary disease.....      | 13.7 % |
| Cerebrovascular degeneration.....   | 4.5 %  |
| Diabetes mellitus.....              | 6.7 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 86.1%  |
| State .....         | 11.9%  |
| Outside State ..... | 2.0%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |           |
|----------------|-----------|
| Hospital ..... | 11.3 Days |
| State .....    | 10.1 Days |
| National ..... | 8.6 Days  |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 288                 |
| Occupancy Rate .....       | 71.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 38.3 %              |
| Case Mix Index (CMI) ..... | 1.2531              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 169    |
| Percent of Physicians Board<br>Certified Specialists ..... | 83.4 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 170    |
| Licensed Practical Nurses .....                            | 39     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | Yes |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation .....      | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates

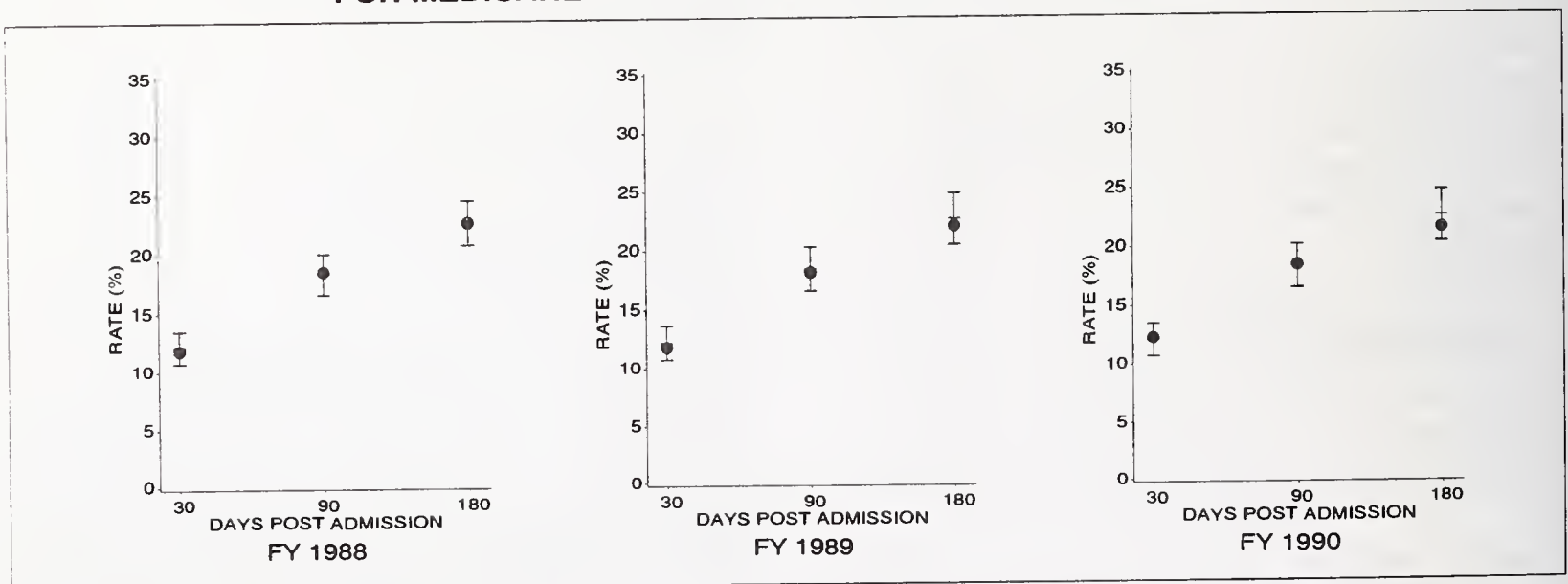
**QUINCY HOSPITAL**  
114 WHITEWELL STREET  
QUINCY, MA 02169  
Medicare Provider Number: 220067

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2319               | 12.3                | 12.1 | 0.7   | 18.4    | 18.3 | 0.9   | 21.5     | 22.5 | 1.1   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 87                 | 29.9                | 28.4 | 8.9   | 35.6    | 31.8 | 10.0  | 36.8     | 34.6 | 10.3  |
| Congestive Heart Failure.....              | 130                | 11.5                | 17.3 | 5.6   | 21.5    | 27.2 | 7.2   | 26.9     | 33.6 | 7.3   |
| Pneumonia/Influenza.....                   | 144                | 22.2                | 22.5 | 3.7   | 31.3    | 30.5 | 4.9   | 33.3     | 35.2 | 5.1   |
| Chronic Obstructive Pulmonary Disease..... | 50                 | 4.0                 | 8.9  | ----- | 12.0    | 15.0 | ----- | 14.0     | 19.4 | ----- |
| Transient Cerebral Ischemia.....           | 31                 | 0.0                 | 2.2  | ----- | 3.2     | 4.9  | ----- | 6.5      | 8.0  | ----- |
| Stroke.....                                | 113                | 24.8                | 20.1 | 6.4   | 30.1    | 28.6 | 5.1   | 31.9     | 33.2 | 5.1   |
| Hip Fracture.....                          | 87                 | 12.6                | 7.7  | 5.2   | 16.1    | 13.7 | 4.7   | 17.2     | 17.7 | 5.4   |
| Sepsis.....                                | 32                 | 15.6                | 25.6 | ----- | 18.8    | 33.7 | ----- | 25.0     | 39.1 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 15                 | 0.0                 | 3.3  | ----- | 0.0     | 7.0  | ----- | 0.0      | 10.3 | ----- |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 37                 | 8.1                 | 4.9  | ----- | 16.2    | 9.6  | ----- | 16.2     | 13.1 | ----- |
| Open Reduction of Hip Fracture.....        | 32                 | 15.6                | 7.8  | ----- | 18.8    | 14.3 | ----- | 18.8     | 18.6 | ----- |
| Prostatectomy.....                         | 52                 | 0.0                 | 1.3  | 2.3   | 7.7     | 3.0  | 4.6   | 7.7      | 4.9  | 4.3   |
| Cholecystectomy.....                       | 31                 | 6.5                 | 3.1  | ----- | 12.9    | 5.5  | ----- | 12.9     | 7.2  | ----- |
| Hysterectomy.....                          | 4                  | 0.0                 | 0.1  | ----- | 0.0     | 0.3  | ----- | 0.0      | 0.6  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$  SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**





**QUINCY HOSPITAL**  
Medicare Provider Number: 220067

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 77.3 years  
Proportion female..... 63.8 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 25.3 %  
Transferred from skilled nursing facility..... 14.0 %  
Admitted for elective procedure..... 10.5 %  
Admitted for emergency..... 60.3 %

**COMORBIDITIES:**

Cancer..... 8.0 %  
Chronic cardiovascular disease..... 39.1 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 2.6 %  
Chronic pulmonary disease..... 14.1 %  
Cerebrovascular degeneration..... 8.9 %  
Diabetes mellitus..... 5.3 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 85.0%  
State ..... 13.2%  
Outside State ..... 1.8%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 11.2 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 271  
Occupancy Rate ..... 70.0 %  
Ownership/Control..... Local Government  
Medicare Discharges ..... 40.2 %  
Case Mix Index (CMI) ..... 1.1980

**STAFFING:**

Total Number of Physicians..... 184  
Percent of Physicians Board  
Certified Specialists..... 78.3 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 187  
Licensed Practical Nurses ..... 10

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

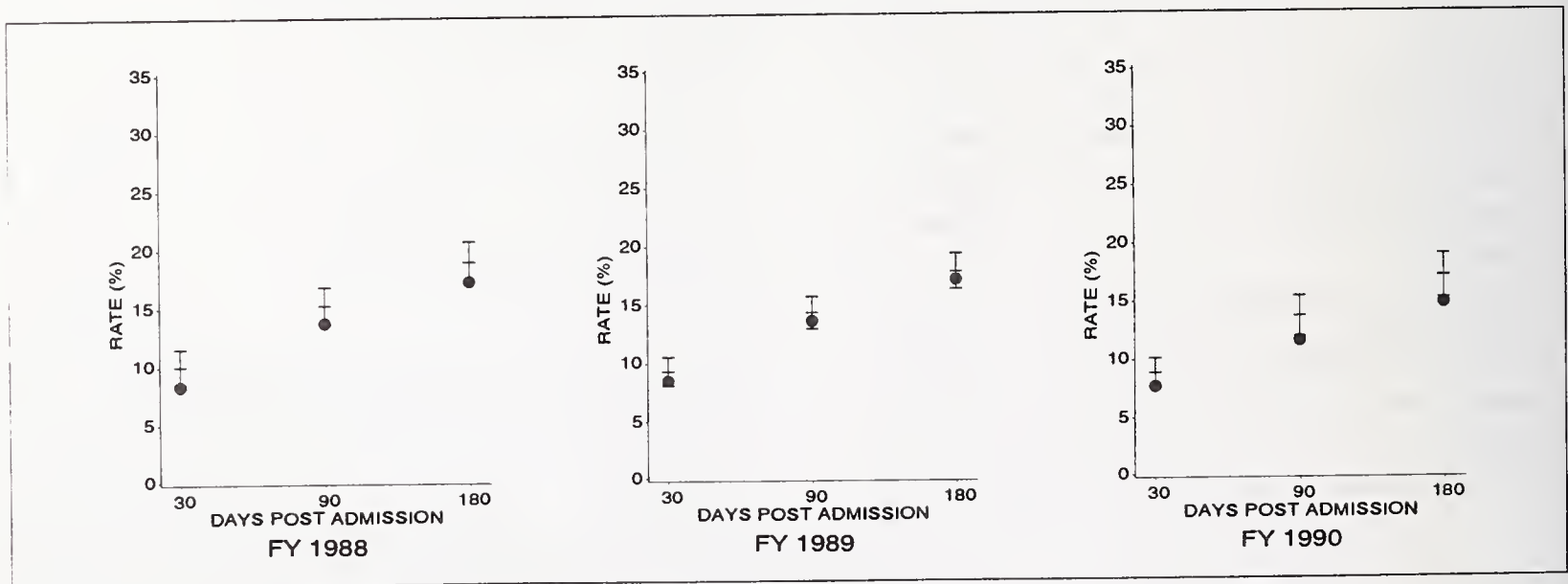
**SALEM HOSPITAL**  
81 HIGHLAND AVENUE  
SALEM, MA 01970  
Medicare Provider Number: 220006

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 3101               | 7.7                 | 8.9  | 0.6   | 11.6    | 13.7 | 0.9   | 14.8     | 17.1 | 0.9   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 119                | 23.5                | 24.5 | 4.0   | 27.7    | 28.0 | 4.9   | 29.4     | 30.9 | 4.7   |
| Congestive Heart Failure.....              | 152                | 8.6                 | 15.4 | 4.7   | 19.7    | 24.1 | 6.3   | 24.3     | 30.2 | 5.6   |
| Pneumonia/Influenza.....                   | 134                | 9.7                 | 15.4 | 5.4   | 17.2    | 20.9 | 5.7   | 18.7     | 24.5 | 6.1   |
| Chronic Obstructive Pulmonary Disease..... | 36                 | 11.1                | 8.3  | ----- | 19.4    | 14.4 | ----- | 22.2     | 18.8 | ----- |
| Transient Cerebral Ischemia.....           | 45                 | 0.0                 | 1.2  | ----- | 4.4     | 2.9  | ----- | 8.9      | 4.8  | ----- |
| Stroke.....                                | 125                | 20.0                | 21.7 | 6.1   | 25.6    | 28.3 | 5.7   | 30.4     | 31.9 | 6.4   |
| Hip Fracture.....                          | 85                 | 4.7                 | 7.0  | 3.5   | 5.9     | 12.4 | 4.9   | 9.4      | 16.2 | 5.7   |
| Sepsis.....                                | 11                 | 18.2                | 26.8 | ----- | 27.3    | 33.8 | ----- | 36.4     | 38.2 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 20                 | 0.0                 | 4.1  | ----- | 0.0     | 8.3  | ----- | 5.0      | 12.0 | ----- |
| Carotid Endarterectomy.....                | 6                  | 0.0                 | 1.3  | ----- | 0.0     | 2.5  | ----- | 0.0      | 3.5  | ----- |
| Hip Replacement/Reconstruction.....        | 87                 | 3.4                 | 2.8  | 1.9   | 4.6     | 5.2  | 2.4   | 5.7      | 7.0  | 2.9   |
| Open Reduction of Hip Fracture.....        | 43                 | 2.3                 | 7.1  | ----- | 2.3     | 13.0 | ----- | 7.0      | 17.1 | ----- |
| Prostatectomy.....                         | 92                 | 0.0                 | 1.0  | 2.1   | 3.3     | 2.4  | 1.8   | 4.3      | 4.0  | 2.1   |
| Cholecystectomy.....                       | 49                 | 2.0                 | 3.6  | ----- | 2.0     | 6.4  | ----- | 6.1      | 8.0  | ----- |
| Hysterectomy.....                          | 23                 | 0.0                 | 0.6  | ----- | 0.0     | 1.4  | ----- | 0.0      | 2.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



**SALEM HOSPITAL**  
Medicare Provider Number: 220006

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 75.7 years  
Proportion female..... 57.8 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 35.5 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 20.4 %  
Admitted for emergency..... 56.4 %

**COMORBIDITIES:**

Cancer..... 7.8 %  
Chronic cardiovascular disease..... 37.1 %  
Chronic liver disease..... 0.9 %  
Chronic renal disease..... 2.6 %  
Chronic pulmonary disease..... 12.5 %  
Cerebrovascular degeneration..... 4.2 %  
Diabetes mellitus..... 6.7 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 93.4%  
State ..... 3.3%  
Outside State ..... 3.3%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 10.2 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 375  
Occupancy Rate ..... 73.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 33.0 %  
Case Mix Index (CMI) ..... 1.2113

**STAFFING:**

Total Number of Physicians..... 276  
Percent of Physicians Board  
Certified Specialists ..... 84.4 %  
Medical Residents/Interns ..... 19  
Registered Nurses..... 470  
Licensed Practical Nurses ..... 30

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# SOLDIERS HOME OF HOLYOKE

CHERRY ST  
HOLYOKE, MA 01040  
Medicare Provider Number: 220153

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 13                 | 23.1                | 13.4 | ----- | 38.5    | 20.9 | ----- | 38.5     | 24.9 | ----- |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Congestive Heart Failure.....              | 0                  |                     |      |       |         |      |       |          |      |       |
| Pneumonia/Influenza.....                   | 1                  | 0.0                 | 15.2 | ----- | 0.0     | 23.1 | ----- | 0.0      | 26.9 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |       |         |      |       |          |      |       |
| Transient Cerebral Ischemia.....           | 1                  | 0.0                 | 3.0  | ----- | 100.0   | 8.0  | ----- | 100.0    | 15.0 | ----- |
| Stroke.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Fracture.....                          | 0                  |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 1                  | 0.0                 | 33.0 | ----- | 0.0     | 40.4 | ----- | 0.0      | 43.9 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 2                  | 0.0                 | 1.4  | ----- | 0.0     | 2.3  | ----- | 0.0      | 3.3  | ----- |
| Cholecystectomy.....                       | 0                  |                     |      |       |         |      |       |          |      |       |
| Hysterectomy.....                          | 0                  |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES

No Graphs are presented when the standard deviation  
was not computed for one or more of the three fiscal years,  
(1988, 1989, or 1990)

# SOLDIERS HOME OF HOLYOKE

Medicare Provider Number: 220153

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.7 years  
Proportion female..... 0.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 0.0 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 0.0 %  
Admitted for emergency..... 0.0 %

### COMORBIDITIES:

Cancer..... 0.0 %  
Chronic cardiovascular disease..... 23.1 %  
Chronic liver disease..... 7.7 %  
Chronic renal disease..... 0.0 %  
Chronic pulmonary disease..... 7.7 %  
Cerebrovascular degeneration..... 15.4 %  
Diabetes mellitus..... 0.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 76.5%  
State ..... 17.6%  
Outside State ..... 5.9%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 16.5 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 286  
Occupancy Rate ..... 78.0 %  
Ownership/Control..... State Government  
Medicare Discharges .....(Not Available)  
Case Mix Index (CMI) ..... 0.9267

### STAFFING:

Total Number of Physicians..... 8  
Percent of Physicians Board  
Certified Specialists..... 62.5 %  
Medical Residents/Interns ..... (Not Available)  
Registered Nurses..... (Not Available)  
Licensed Practical Nurses..... (Not Available)

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# SOMERVILLE HOSPITAL

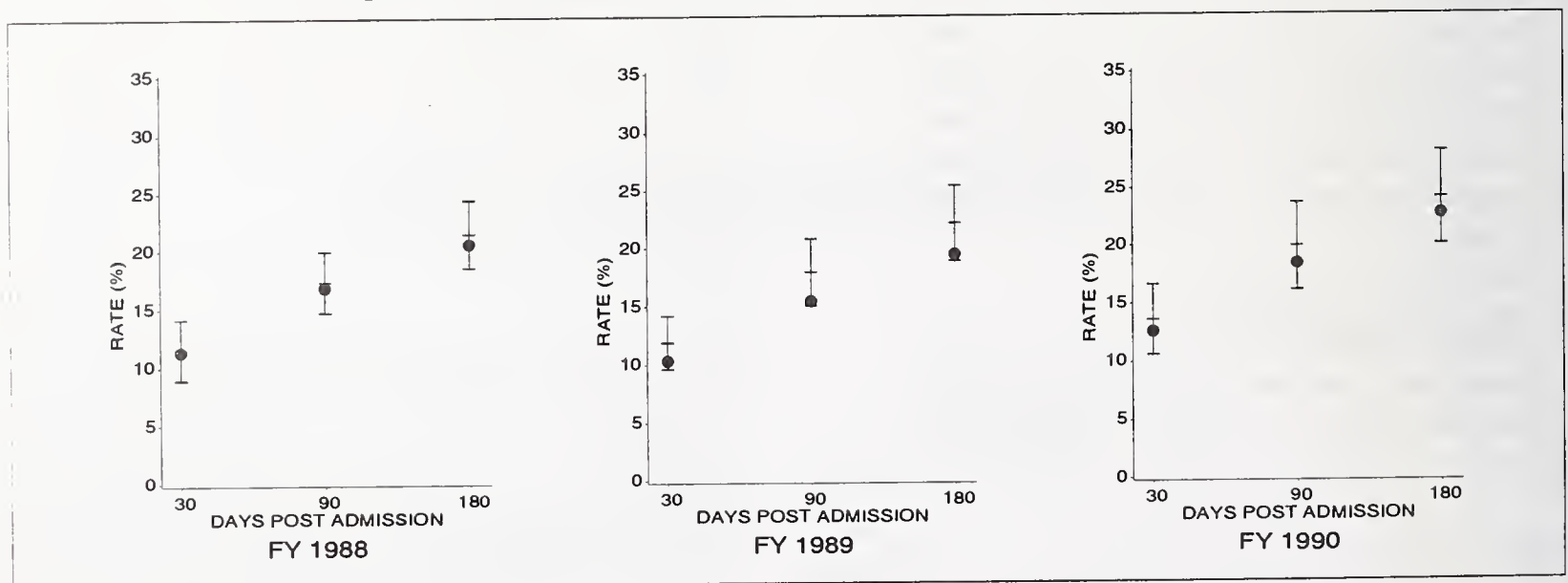
230 HIGHLAND AVE  
SOMERVILLE, MA 02143  
Medicare Provider Number: 220004

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 986             | 12.6                | 13.6 | 1.5   | 18.4    | 19.9 | 1.9   | 22.7     | 24.1 | 2.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 33              | 27.3                | 26.3 | ----- | 30.3    | 29.9 | ----- | 30.3     | 33.1 | ----- |
| Congestive Heart Failure.....              | 59              | 10.2                | 16.9 | 8.4   | 23.7    | 25.8 | 7.6   | 30.5     | 32.0 | 8.6   |
| Pneumonia/Influenza.....                   | 34              | 2.9                 | 18.0 | ----- | 8.8     | 24.5 | ----- | 8.8      | 28.6 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 17              | 11.8                | 11.2 | ----- | 11.8    | 18.9 | ----- | 11.8     | 24.0 | ----- |
| Transient Cerebral Ischemia.....           | 4               | 0.0                 | 10.0 | ----- | 25.0    | 19.4 | ----- | 25.0     | 25.0 | ----- |
| Stroke.....                                | 27              | 22.2                | 24.0 | ----- | 33.3    | 31.3 | ----- | 37.0     | 35.1 | ----- |
| Hip Fracture.....                          | 31              | 12.9                | 8.6  | ----- | 12.9    | 15.3 | ----- | 19.4     | 19.5 | ----- |
| Sepsis.....                                | 24              | 20.8                | 33.2 | ----- | 25.0    | 39.3 | ----- | 25.0     | 43.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 4               | 25.0                | 4.3  | ----- | 25.0    | 9.1  | ----- | 25.0     | 13.3 | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 11              | 18.2                | 6.8  | ----- | 18.2    | 13.3 | ----- | 18.2     | 17.9 | ----- |
| Open Reduction of Hip Fracture.....        | 18              | 11.1                | 7.4  | ----- | 11.1    | 13.4 | ----- | 16.7     | 17.2 | ----- |
| Prostatectomy.....                         | 23              | 4.3                 | 1.5  | ----- | 4.3     | 3.7  | ----- | 13.0     | 6.5  | ----- |
| Cholecystectomy.....                       | 17              | 0.0                 | 2.9  | ----- | 0.0     | 4.7  | ----- | 0.0      | 5.8  | ----- |
| Hysterectomy.....                          | 6               | 16.7                | 2.5  | ----- | 16.7    | 5.5  | ----- | 16.7     | 8.0  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# SOMERVILLE HOSPITAL

Medicare Provider Number: 220004

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.3 years  
Proportion female..... 60.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 4.6 %  
Transferred from skilled nursing facility..... 22.7 %  
Admitted for elective procedure..... 13.5 %  
Admitted for emergency..... 70.4 %

### COMORBIDITIES:

Cancer..... 8.4 %  
Chronic cardiovascular disease..... 44.9 %  
Chronic liver disease..... 1.4 %  
Chronic renal disease..... 1.8 %  
Chronic pulmonary disease..... 16.4 %  
Cerebrovascular degeneration..... 5.7 %  
Diabetes mellitus..... 5.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 91.1%  
State ..... 7.4%  
Outside State ..... 1.5%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.0 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 79  
Occupancy Rate ..... 74.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 50.4 %  
Case Mix Index (CMI) ..... 1.3534

### STAFFING:

Total Number of Physicians..... 55  
Percent of Physicians Board  
Certified Specialists ..... 80.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 78  
Licensed Practical Nurses ..... 11

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# SOUTH SHORE HOSPITAL

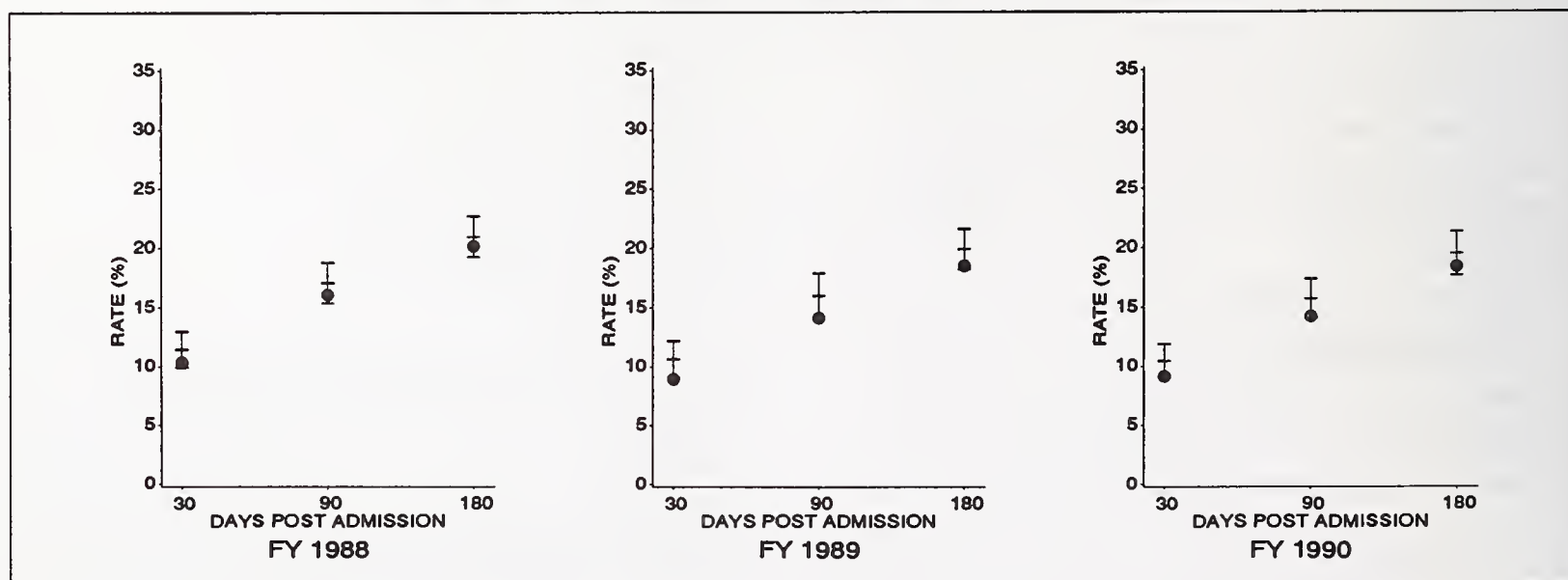
55 FOGG RD  
SOUTH WEYMOUTH, MA 02190  
Medicare Provider Number: 220100

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 3093            | 9.1                 | 10.4 | 0.7   | 14.2    | 15.7 | 0.8   | 18.4     | 19.5 | 0.9   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial infarction.....           | 128             | 17.2                | 25.6 | 5.9   | 19.5    | 28.6 | 6.0   | 21.1     | 31.2 | 6.3   |
| Congestive Heart Failure.....              | 213             | 14.6                | 16.3 | 3.1   | 24.4    | 25.5 | 3.3   | 28.6     | 31.7 | 3.8   |
| Pneumonia/Influenza.....                   | 156             | 25.6                | 18.6 | 6.6   | 29.5    | 25.5 | 7.1   | 32.7     | 29.8 | 6.4   |
| Chronic Obstructive Pulmonary Disease..... | 47              | 17.0                | 9.3  | ----- | 27.7    | 16.3 | ----- | 31.9     | 21.1 | ----- |
| Transient Cerebral ischemia.....           | 42              | 0.0                 | 2.6  | ----- | 2.4     | 5.6  | ----- | 7.1      | 8.6  | ----- |
| Stroke.....                                | 124             | 15.3                | 19.7 | 6.7   | 20.2    | 26.7 | 8.7   | 26.6     | 30.6 | 9.0   |
| Hip Fracture.....                          | 114             | 4.4                 | 6.3  | 3.2   | 6.1     | 11.6 | 4.0   | 11.4     | 15.3 | 3.9   |
| Sepsis.....                                | 35              | 22.9                | 31.0 | ----- | 25.7    | 40.9 | ----- | 45.7     | 46.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 18              | 0.0                 | 4.0  | ----- | 0.0     | 7.0  | ----- | 0.0      | 9.5  | ----- |
| Carotid Endarterectomy.....                | 9               | 0.0                 | 1.4  | ----- | 0.0     | 2.5  | ----- | 0.0      | 3.7  | ----- |
| Hip Replacement/Reconstruction.....        | 71              | 2.8                 | 4.2  | 3.7   | 2.8     | 8.0  | 5.4   | 5.6      | 10.9 | 5.6   |
| Open Reduction of Hip Fracture.....        | 54              | 3.7                 | 5.6  | 5.3   | 7.4     | 10.6 | 6.8   | 14.8     | 14.2 | 6.9   |
| Prostatectomy.....                         | 81              | 0.0                 | 1.1  | 1.6   | 1.2     | 2.5  | 2.2   | 2.5      | 4.3  | 2.9   |
| Cholecystectomy.....                       | 53              | 1.9                 | 3.2  | 3.1   | 3.8     | 6.2  | 4.8   | 5.7      | 8.6  | 5.3   |
| Hysterectomy.....                          | 21              | 0.0                 | 0.7  | ----- | 0.0     | 1.5  | ----- | 4.8      | 2.3  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



## SOUTH SHORE HOSPITAL

Medicare Provider Number: 220100

### FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

#### DEMOGRAPHICS:

Average age at admission..... 75.8 years  
Proportion female..... 58.9 %

#### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 24.1 %  
Transferred from skilled nursing facility..... 7.4 %  
Admitted for elective procedure..... 12.6 %  
Admitted for emergency..... 71.7 %

#### COMORBIDITIES:

Cancer..... 8.8 %  
Chronic cardiovascular disease..... 35.6 %  
Chronic liver disease..... 1.3 %  
Chronic renal disease..... 2.9 %  
Chronic pulmonary disease..... 12.3 %  
Cerebrovascular degeneration..... 5.1 %  
Diabetes mellitus..... 7.2 %

### ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

#### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 50.1%  
State ..... 47.5%  
Outside State ..... 2.4%  
Total ..... 100.0%

#### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.7 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

### HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

#### PROFILE:

Total Beds ..... 302  
Occupancy Rate ..... 83.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 33.1 %  
Case Mix Index (CMI) ..... 1.2307

#### STAFFING:

Total Number of Physicians..... 184  
Percent of Physicians Board  
Certified Specialists..... 96.2 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 442  
Licensed Practical Nurses ..... 51

#### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

#### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# SOUTHWOOD COMMUNITY HOSPITAL

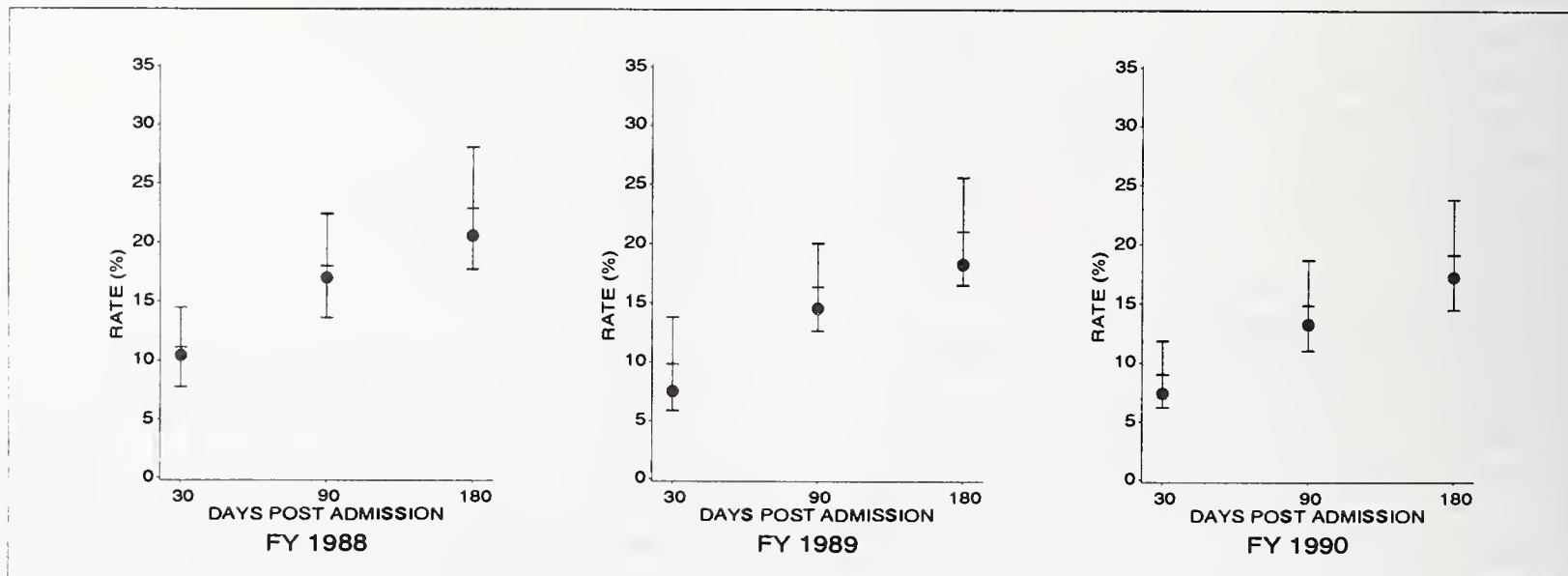
111 DEDHAM STREET  
NORFOLK, MA 02056  
Medicare Provider Number: 220079

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 661             | 7.4                 | 9.0  | 1.4   | 13.2    | 14.8 | 1.9   | 17.2     | 19.1 | 2.3   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 17              | 23.5                | 29.5 | ----- | 23.5    | 35.3 | ----- | 29.4     | 39.2 | ----- |
| Congestive Heart Failure.....              | 25              | 20.0                | 16.8 | ----- | 20.0    | 26.2 | ----- | 28.0     | 32.3 | ----- |
| Pneumonia/Influenza.....                   | 37              | 8.1                 | 15.4 | ----- | 13.5    | 21.1 | ----- | 13.5     | 24.7 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 10              | 0.0                 | 6.7  | ----- | 20.0    | 13.1 | ----- | 20.0     | 18.8 | ----- |
| Transient Cerebral Ischemia.....           | 10              | 0.0                 | 3.5  | ----- | 0.0     | 7.2  | ----- | 0.0      | 10.2 | ----- |
| Stroke.....                                | 11              | 9.1                 | 14.5 | ----- | 9.1     | 20.8 | ----- | 9.1      | 24.6 | ----- |
| Hip Fracture.....                          | 7               | 14.3                | 6.4  | ----- | 14.3    | 11.6 | ----- | 14.3     | 14.6 | ----- |
| Sepsis.....                                | 5               | 20.0                | 14.1 | ----- | 20.0    | 20.5 | ----- | 20.0     | 24.4 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 4               | 0.0                 | 4.2  | ----- | 25.0    | 8.4  | ----- | 50.0     | 11.9 | ----- |
| Carotid Endarterectomy.....                | 1               | 0.0                 | 1.4  | ----- | 0.0     | 2.4  | ----- | 0.0      | 3.6  | ----- |
| Hip Replacement/Reconstruction.....        | 3               | 0.0                 | 6.2  | ----- | 0.0     | 11.0 | ----- | 0.0      | 13.9 | ----- |
| Open Reduction of Hip Fracture.....        | 4               | 25.0                | 5.2  | ----- | 25.0    | 10.2 | ----- | 25.0     | 13.4 | ----- |
| Prostatectomy.....                         | 1               | 0.0                 | 0.6  | ----- | 0.0     | 1.0  | ----- | 0.0      | 1.4  | ----- |
| Cholecystectomy.....                       | 11              | 0.0                 | 3.1  | ----- | 0.0     | 6.4  | ----- | 0.0      | 8.8  | ----- |
| Hysterectomy.....                          | 2               | 0.0                 | 0.2  | ----- | 0.0     | 0.3  | ----- | 0.0      | 0.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# SOUTHWOOD COMMUNITY HOSPITAL

Medicare Provider Number: 220079

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.0 years  
Proportion female..... 58.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 45.5 %  
Transferred from skilled nursing facility..... 0.3 %  
Admitted for elective procedure..... 9.2 %  
Admitted for emergency..... 87.9 %

### COMORBIDITIES:

Cancer..... 15.3 %  
Chronic cardiovascular disease..... 29.2 %  
Chronic liver disease..... 3.6 %  
Chronic renal disease..... 2.1 %  
Chronic pulmonary disease..... 13.5 %  
Cerebrovascular degeneration..... 4.7 %  
Diabetes mellitus..... 6.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 62.4%  
State..... 33.5%  
Outside State..... 4.1%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 10.6 Days  
State..... 10.1 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 149  
Occupancy Rate..... 67.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges..... 27.8 %  
Case Mix Index (CMI)..... 1.1196

### STAFFING:

Total Number of Physicians..... 73  
Percent of Physicians Board  
Certified Specialists..... 90.4 %  
Medical Residents/Interns..... 0  
Registered Nurses..... 99  
Licensed Practical Nurses..... 26

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... No  
Comprehensive Geriatric..... No  
Hospice Care..... Yes  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... No  
Other Intensive Care..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... Yes  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ST ANNES HOSPITAL CORPORATION

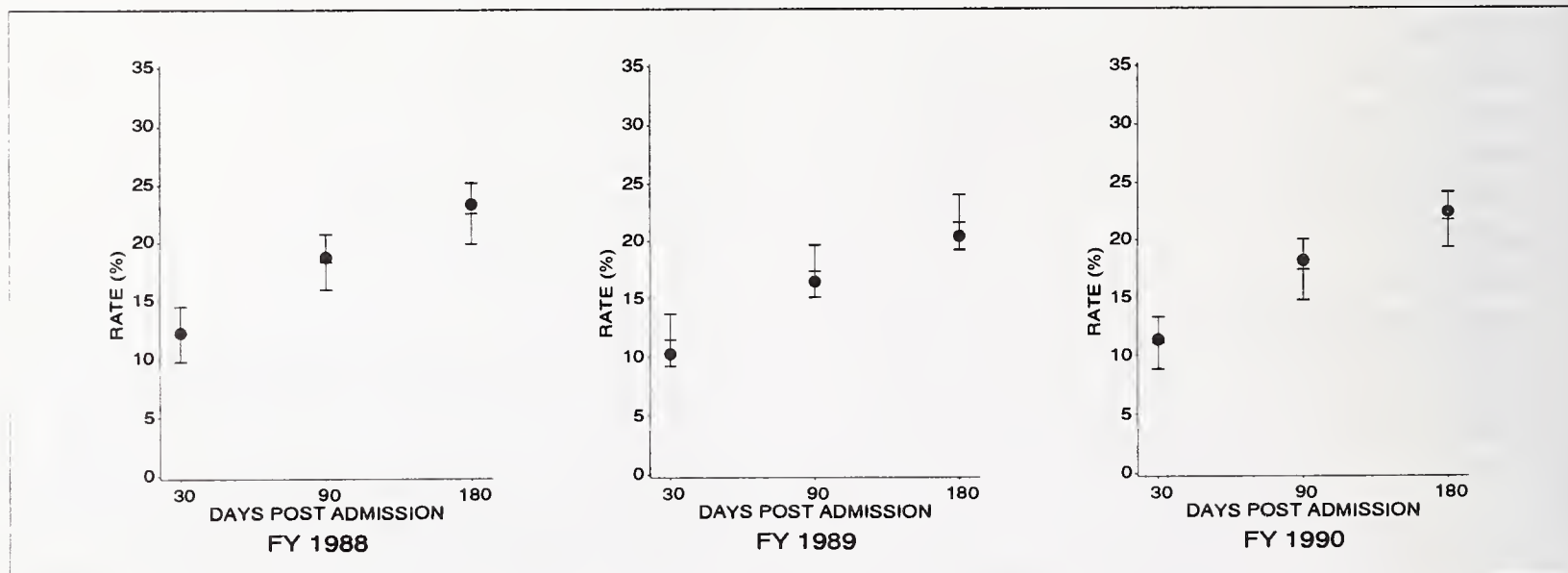
795 MIDDLE ST  
FALL RIVER, MA 02722  
Medicare Provider Number: 220020

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1706            | 11.4                | 11.1 | 1.1  | 18.2    | 17.4 | 1.3  | 22.4     | 21.7 | 1.2  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 83              | 21.7                | 20.0 | 6.2  | 27.7    | 23.3 | 6.2  | 27.7     | 26.0 | 5.3  |
| Congestive Heart Failure.....              | 100             | 8.0                 | 16.1 | 4.7  | 15.0    | 25.2 | 5.5  | 21.0     | 31.4 | 6.4  |
| Pneumonia/Influenza.....                   | 80              | 12.5                | 19.2 | 6.2  | 18.7    | 25.9 | 6.4  | 23.7     | 30.0 | 6.2  |
| Chronic Obstructive Pulmonary Disease..... | 36              | 8.3                 | 8.1  | ---- | 11.1    | 14.2 | ---- | 16.7     | 19.1 | ---- |
| Transient Cerebral Ischemia.....           | 26              | 7.7                 | 2.5  | ---- | 11.5    | 5.4  | ---- | 11.5     | 8.7  | ---- |
| Stroke.....                                | 77              | 24.7                | 17.9 | 6.1  | 32.5    | 25.9 | 8.3  | 40.3     | 29.9 | 9.2  |
| Hip Fracture.....                          | 35              | 14.3                | 6.2  | ---- | 17.1    | 11.0 | ---- | 17.1     | 14.3 | ---- |
| Sepsis.....                                | 21              | 23.8                | 31.7 | ---- | 38.1    | 43.7 | ---- | 38.1     | 49.7 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 12              | 16.7                | 4.6  | ---- | 16.7    | 8.0  | ---- | 16.7     | 10.7 | ---- |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 17              | 5.9                 | 4.7  | ---- | 5.9     | 8.6  | ---- | 5.9      | 11.2 | ---- |
| Open Reduction of Hip Fracture.....        | 18              | 22.2                | 6.2  | ---- | 22.2    | 11.2 | ---- | 22.2     | 14.8 | ---- |
| Prostatectomy.....                         | 26              | 0.0                 | 1.1  | ---- | 0.0     | 2.5  | ---- | 0.0      | 3.9  | ---- |
| Cholecystectomy.....                       | 43              | 2.3                 | 1.4  | ---- | 2.3     | 2.4  | ---- | 2.3      | 3.1  | ---- |
| Hysterectomy.....                          | 10              | 0.0                 | 0.7  | ---- | 0.0     | 1.8  | ---- | 0.0      | 3.0  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# ST ANNES HOSPITAL CORPORATION

Medicare Provider Number: 220020

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 75.4 years |
| Proportion female.....        | 57.6 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 23.9 % |
| Transferred from skilled nursing facility..... | 3.3 %  |
| Admitted for elective procedure.....           | 8.8 %  |
| Admitted for emergency.....                    | 68.1 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 13.8 % |
| Chronic cardiovascular disease..... | 33.5 % |
| Chronic liver disease.....          | 0.8 %  |
| Chronic renal disease.....          | 2.9 %  |
| Chronic pulmonary disease.....      | 12.6 % |
| Cerebrovascular degeneration.....   | 4.2 %  |
| Diabetes mellitus.....              | 10.7 % |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 81.2%  |
| State .....         | 1.3%   |
| Outside State ..... | 17.5%  |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |           |
|----------------|-----------|
| Hospital ..... | 12.6 Days |
| State .....    | 10.1 Days |
| National ..... | 8.6 Days  |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |        |
|----------------------------|--------|
| Total Beds .....           | 182    |
| Occupancy Rate .....       | 73.0 % |
| Ownership/Control.....     | Church |
| Medicare Discharges .....  | 44.7 % |
| Case Mix Index (CMI) ..... | 1.0979 |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 136    |
| Percent of Physicians Board<br>Certified Specialists ..... | 78.7 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 112    |
| Licensed Practical Nurses .....                            | 28     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | Yes |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates

# ST ELIZABETHS HOSPITAL

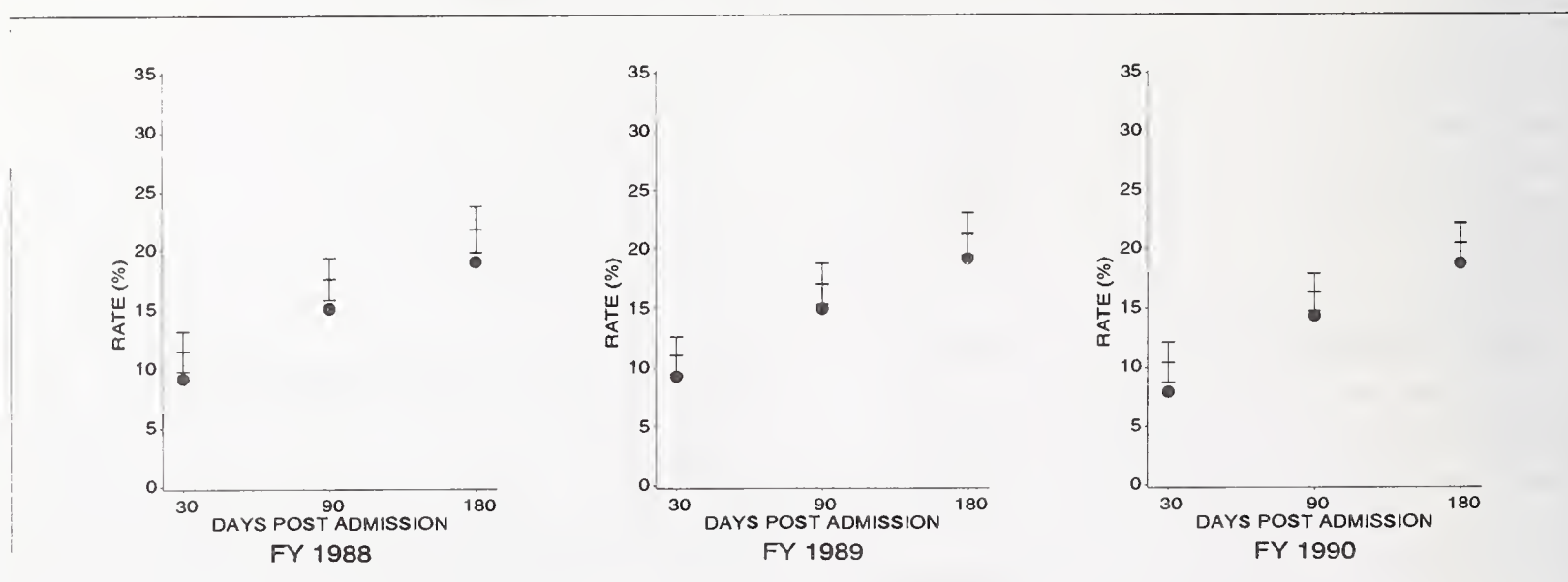
736 CAMBRIDGE ST  
BRIGHTON, MA 02135  
Medicare Provider Number: 220036

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 3202            | 7.9                 | 10.4 | 0.9   | 14.3    | 16.3 | 0.8   | 18.7     | 20.4 | 0.9   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 50              | 24.0                | 29.0 | ----- | 30.0    | 32.6 | ----- | 34.0     | 35.6 | ----- |
| Congestive Heart Failure.....              | 156             | 12.8                | 17.8 | 4.5   | 21.2    | 27.7 | 5.4   | 25.6     | 34.6 | 5.5   |
| Pneumonia/Influenza.....                   | 211             | 16.1                | 21.6 | 3.7   | 21.8    | 29.7 | 4.5   | 26.1     | 34.8 | 4.8   |
| Chronic Obstructive Pulmonary Disease..... | 26              | 11.5                | 9.8  | ----- | 11.5    | 17.2 | ----- | 11.5     | 22.8 | ----- |
| Transient Cerebral Ischemia.....           | 34              | 0.0                 | 2.2  | ----- | 2.9     | 4.9  | ----- | 5.9      | 8.0  | ----- |
| Stroke.....                                | 95              | 11.6                | 21.8 | 6.4   | 18.9    | 29.5 | 6.4   | 23.2     | 33.6 | 6.3   |
| Hip Fracture.....                          | 80              | 6.3                 | 6.3  | 3.2   | 11.2    | 11.5 | 3.6   | 15.0     | 15.4 | 4.1   |
| Sepsis.....                                | 37              | 29.7                | 29.4 | ----- | 32.4    | 38.8 | ----- | 35.1     | 44.0 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 46              | 4.3                 | 1.8  | ----- | 4.3     | 2.8  | ----- | 6.5      | 3.7  | ----- |
| Coronary Artery Bypass Graft.....          | 111             | 6.3                 | 5.3  | 2.3   | 10.8    | 8.5  | 3.4   | 12.6     | 10.0 | 3.8   |
| Initial Pacemaker Insertion.....           | 21              | 0.0                 | 2.3  | ----- | 0.0     | 4.6  | ----- | 9.5      | 6.9  | ----- |
| Carotid Endarterectomy.....                | 5               | 0.0                 | 1.0  | ----- | 0.0     | 1.8  | ----- | 0.0      | 2.5  | ----- |
| Hip Replacement/Reconstruction.....        | 39              | 5.1                 | 3.5  | ----- | 7.7     | 7.0  | ----- | 10.3     | 9.6  | ----- |
| Open Reduction of Hip Fracture.....        | 36              | 8.3                 | 6.2  | ----- | 13.9    | 11.4 | ----- | 19.4     | 15.3 | ----- |
| Prostatectomy.....                         | 123             | 1.6                 | 0.6  | 1.1   | 2.4     | 1.6  | 1.4   | 2.4      | 2.8  | 1.8   |
| Cholecystectomy.....                       | 35              | 2.9                 | 3.8  | ----- | 5.7     | 6.6  | ----- | 5.7      | 8.7  | ----- |
| Hysterectomy.....                          | 25              | 0.0                 | 1.3  | ----- | 0.0     | 2.8  | ----- | 0.0      | 4.3  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ST ELIZABETHS HOSPITAL

Medicare Provider Number: 220036

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 75.8 years |
| Proportion female.....        | 57.8 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 31.2 % |
| Transferred from skilled nursing facility..... | 12.5 % |
| Admitted for elective procedure.....           | 23.1 % |
| Admitted for emergency.....                    | 60.1 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 7.4 %  |
| Chronic cardiovascular disease..... | 35.0 % |
| Chronic liver disease.....          | 1.1 %  |
| Chronic renal disease.....          | 5.0 %  |
| Chronic pulmonary disease.....      | 11.3 % |
| Cerebrovascular degeneration.....   | 8.5 %  |
| Diabetes mellitus.....              | 5.4 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 37.1%  |
| State .....         | 59.2%  |
| Outside State ..... | 3.7%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |           |
|----------------|-----------|
| Hospital ..... | 9.8 Days  |
| State .....    | 10.1 Days |
| National ..... | 8.6 Days  |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |        |
|----------------------------|--------|
| Total Beds .....           | 350    |
| Occupancy Rate .....       | 90.0 % |
| Ownership/Control.....     | Church |
| Medicare Discharges .....  | 39.9 % |
| Case Mix Index (CMI) ..... | 1.4868 |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 291    |
| Percent of Physicians Board<br>Certified Specialists ..... | 84.5 % |
| Medical Residents/Interns .....                            | 129    |
| Registered Nurses.....                                     | 429    |
| Licensed Practical Nurses .....                            | 7      |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | Yes |
| Comprehensive Geriatric .....         | Yes |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | Yes |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | Yes |
| Rehabilitation.....       | No  |
| Psychiatric .....         | Yes |
| Medicare Swing Beds ..... | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates



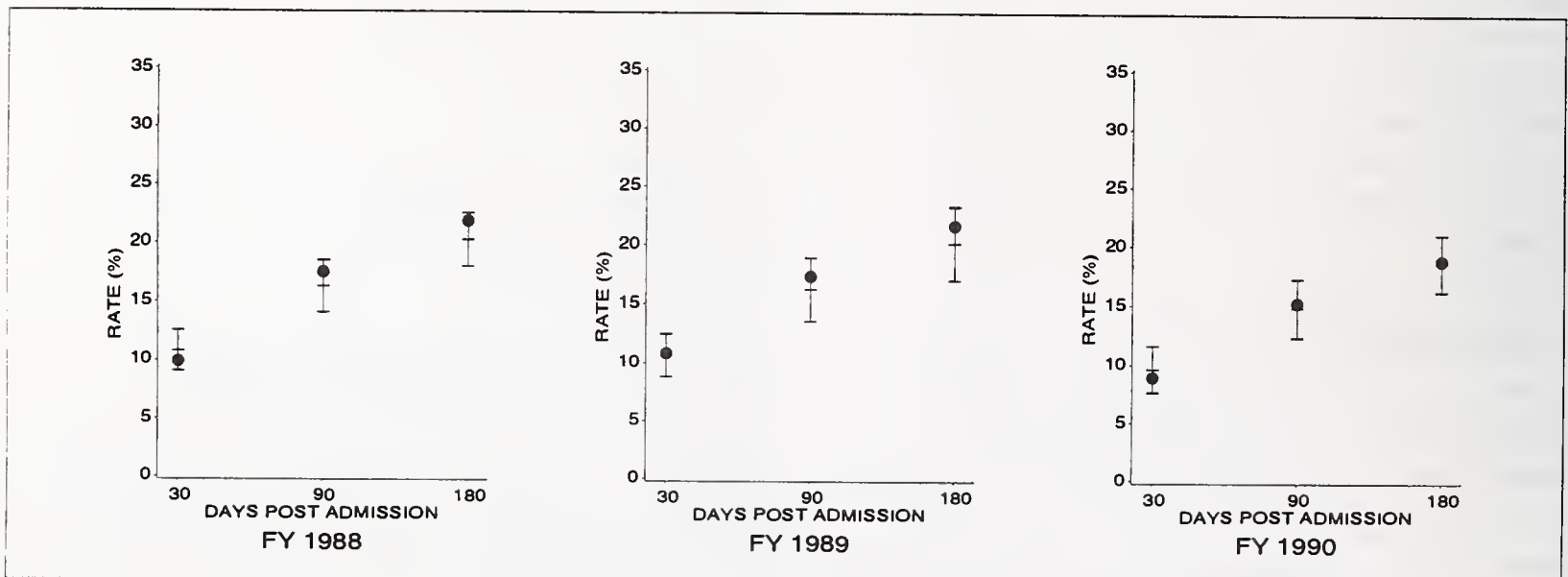
**ST JOHNS HOSPITAL**  
1 HOSPITAL DR  
LOWELL, MA 01852  
Medicare Provider Number: 220082

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1938               | 8.9                 | 9.6  | 1.0  | 15.2    | 14.8 | 1.2  | 18.8     | 18.6 | 1.2  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 80                 | 30.0                | 22.6 | 8.6  | 33.7    | 26.6 | 9.2  | 36.2     | 29.8 | 9.8  |
| Congestive Heart Failure.....              | 109                | 15.6                | 17.3 | 5.7  | 25.7    | 27.0 | 5.5  | 30.3     | 33.8 | 5.9  |
| Pneumonia/Influenza.....                   | 115                | 20.0                | 17.6 | 4.1  | 25.2    | 24.2 | 4.5  | 29.6     | 28.4 | 4.3  |
| Chronic Obstructive Pulmonary Disease..... | 42                 | 7.1                 | 6.2  | ---- | 9.5     | 11.3 | ---- | 9.5      | 16.0 | ---- |
| Transient Cerebral Ischemia.....           | 26                 | 0.0                 | 2.9  | ---- | 0.0     | 6.1  | ---- | 7.7      | 9.2  | ---- |
| Stroke.....                                | 59                 | 10.2                | 19.0 | 7.6  | 22.0    | 26.5 | 7.5  | 25.4     | 30.8 | 6.7  |
| Hip Fracture.....                          | 43                 | 7.0                 | 6.6  | ---- | 18.6    | 11.5 | ---- | 23.3     | 14.9 | ---- |
| Sepsis.....                                | 15                 | 33.3                | 24.9 | ---- | 40.0    | 33.6 | ---- | 40.0     | 38.2 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 13                 | 0.0                 | 2.9  | ---- | 7.7     | 6.0  | ---- | 7.7      | 9.0  | ---- |
| Carotid Endarterectomy.....                | 5                  | 0.0                 | 1.8  | ---- | 0.0     | 3.1  | ---- | 0.0      | 4.3  | ---- |
| Hip Replacement/Reconstruction.....        | 30                 | 3.3                 | 3.0  | ---- | 13.3    | 5.6  | ---- | 13.3     | 7.4  | ---- |
| Open Reduction of Hip Fracture.....        | 25                 | 8.0                 | 6.4  | ---- | 16.0    | 11.5 | ---- | 24.0     | 15.1 | ---- |
| Prostatectomy.....                         | 75                 | 0.0                 | 0.9  | 1.5  | 2.7     | 2.2  | 1.8  | 5.3      | 3.7  | 2.6  |
| Cholecystectomy.....                       | 35                 | 0.0                 | 2.9  | ---- | 2.9     | 5.3  | ---- | 2.9      | 6.9  | ---- |
| Hysterectomy.....                          | 6                  | 0.0                 | 0.4  | ---- | 0.0     | 1.0  | ---- | 0.0      | 1.8  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



# ST JOHNS HOSPITAL

Medicare Provider Number: 220082

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.8 years  
Proportion female..... 60.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 26.2 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 13.2 %  
Admitted for emergency..... 69.0 %

### COMORBIDITIES:

Cancer..... 8.8 %  
Chronic cardiovascular disease..... 35.8 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 3.3 %  
Chronic pulmonary disease..... 15.3 %  
Cerebrovascular degeneration..... 4.5 %  
Diabetes mellitus..... 8.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 91.9%  
State ..... 3.9%  
Outside State ..... 4.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 12.2 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 246  
Occupancy Rate ..... 65.0 %  
Ownership/Control..... Church  
Medicare Discharges ..... 46.6 %  
Case Mix Index (CMI) ..... 1.1946

### STAFFING:

Total Number of Physicians..... 140  
Percent of Physicians Board  
Certified Specialists ..... 72.9 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 145  
Licensed Practical Nurses ..... 38

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ST JOSEPHS HOSPITAL

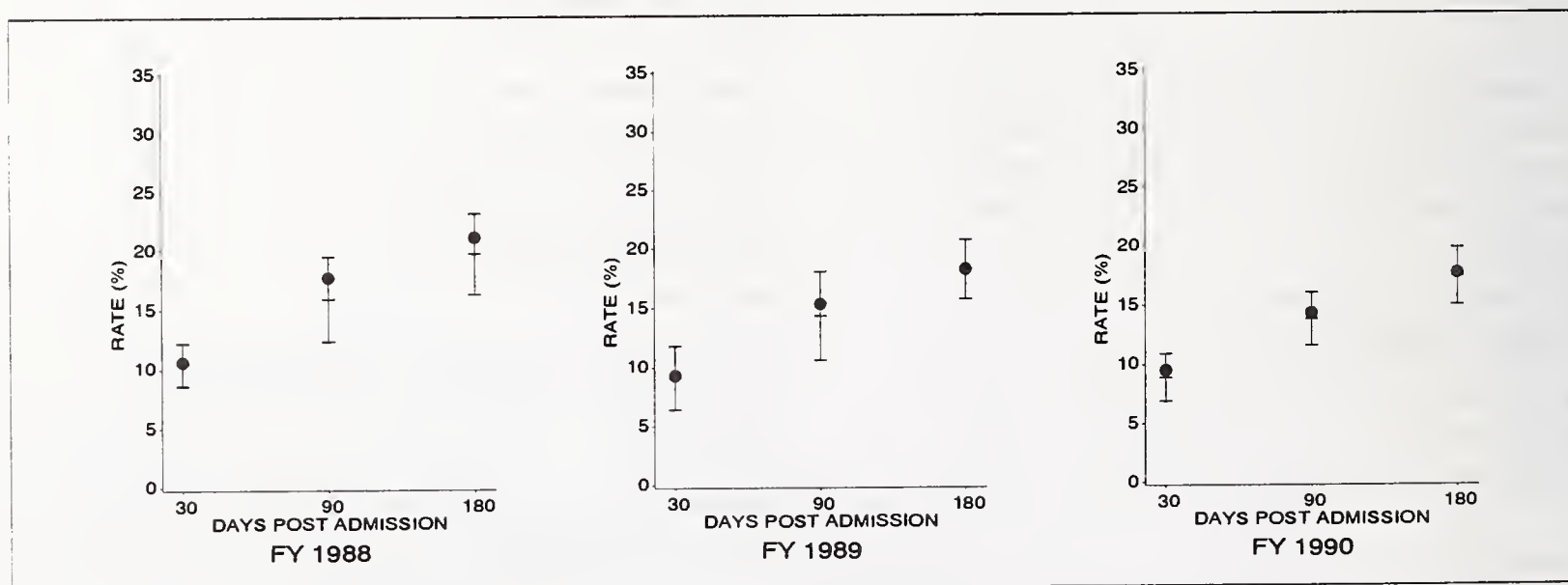
220 PAUTUCKET ST  
LOWELL, MA 01854  
Medicare Provider Number: 220045

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1257            | 9.5                 | 8.9  | 1.0   | 14.3    | 13.8 | 1.1   | 17.7     | 17.4 | 1.2   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 39              | 23.1                | 21.7 | ----- | 30.8    | 24.5 | ----- | 33.3     | 26.9 | ----- |
| Congestive Heart Failure.....              | 81              | 9.9                 | 14.1 | 4.4   | 17.3    | 22.4 | 6.0   | 19.8     | 28.7 | 7.2   |
| Pneumonia/Influenza.....                   | 35              | 34.3                | 22.2 | ----- | 40.0    | 29.5 | ----- | 48.6     | 33.8 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 29              | 3.4                 | 8.0  | ----- | 6.9     | 14.0 | ----- | 17.2     | 18.3 | ----- |
| Transient Cerebral Ischemia.....           | 18              | 0.0                 | 1.5  | ----- | 0.0     | 3.5  | ----- | 11.1     | 5.8  | ----- |
| Stroke.....                                | 50              | 16.0                | 19.7 | ----- | 24.0    | 25.9 | ----- | 30.0     | 29.5 | ----- |
| Hip Fracture.....                          | 49              | 2.0                 | 6.6  | ----- | 6.1     | 12.1 | ----- | 8.2      | 15.8 | ----- |
| Sepsis.....                                | 13              | 30.8                | 22.4 | ----- | 38.5    | 28.3 | ----- | 38.5     | 31.9 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 4               | 0.0                 | 3.6  | ----- | 0.0     | 6.7  | ----- | 0.0      | 9.4  | ----- |
| Carotid Endarterectomy.....                | 2               | 0.0                 | 0.9  | ----- | 0.0     | 1.6  | ----- | 0.0      | 2.3  | ----- |
| Hip Replacement/Reconstruction.....        | 20              | 0.0                 | 2.8  | ----- | 0.0     | 5.4  | ----- | 0.0      | 7.4  | ----- |
| Open Reduction of Hip Fracture.....        | 32              | 3.1                 | 6.0  | ----- | 9.4     | 11.5 | ----- | 12.5     | 15.3 | ----- |
| Prostatectomy.....                         | 50              | 0.0                 | 1.3  | ----- | 6.0     | 3.0  | ----- | 6.0      | 5.0  | ----- |
| Cholecystectomy.....                       | 17              | 0.0                 | 2.7  | ----- | 0.0     | 5.2  | ----- | 5.9      | 7.3  | ----- |
| Hysterectomy.....                          | 13              | 0.0                 | 0.2  | ----- | 7.7     | 0.5  | ----- | 7.7      | 1.0  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# ST JOSEPHS HOSPITAL

Medicare Provider Number: 220045

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 74.5 years |
| Proportion female.....        | 57.5 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 28.9 % |
| Transferred from skilled nursing facility..... | 0.5 %  |
| Admitted for elective procedure.....           | 13.9 % |
| Admitted for emergency.....                    | 62.1 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 7.2 %  |
| Chronic cardiovascular disease..... | 31.8 % |
| Chronic liver disease.....          | 2.3 %  |
| Chronic renal disease.....          | 7.8 %  |
| Chronic pulmonary disease.....      | 15.2 % |
| Cerebrovascular degeneration.....   | 4.1 %  |
| Diabetes mellitus.....              | 8.4 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 94.0%  |
| State .....         | 2.5%   |
| Outside State ..... | 3.5%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |           |
|----------------|-----------|
| Hospital ..... | 12.3 Days |
| State .....    | 10.1 Days |
| National ..... | 8.6 Days  |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 158                 |
| Occupancy Rate .....       | 69.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | (Not Available)     |
| Case Mix Index (CMI) ..... | 1.2070              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 98     |
| Percent of Physicians Board<br>Certified Specialists ..... | 78.6 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 141    |
| Licensed Practical Nurses .....                            | 38     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | Yes |
| Hospice Care .....                    | Yes |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates

# ST LUKES HEALTHCARE INC

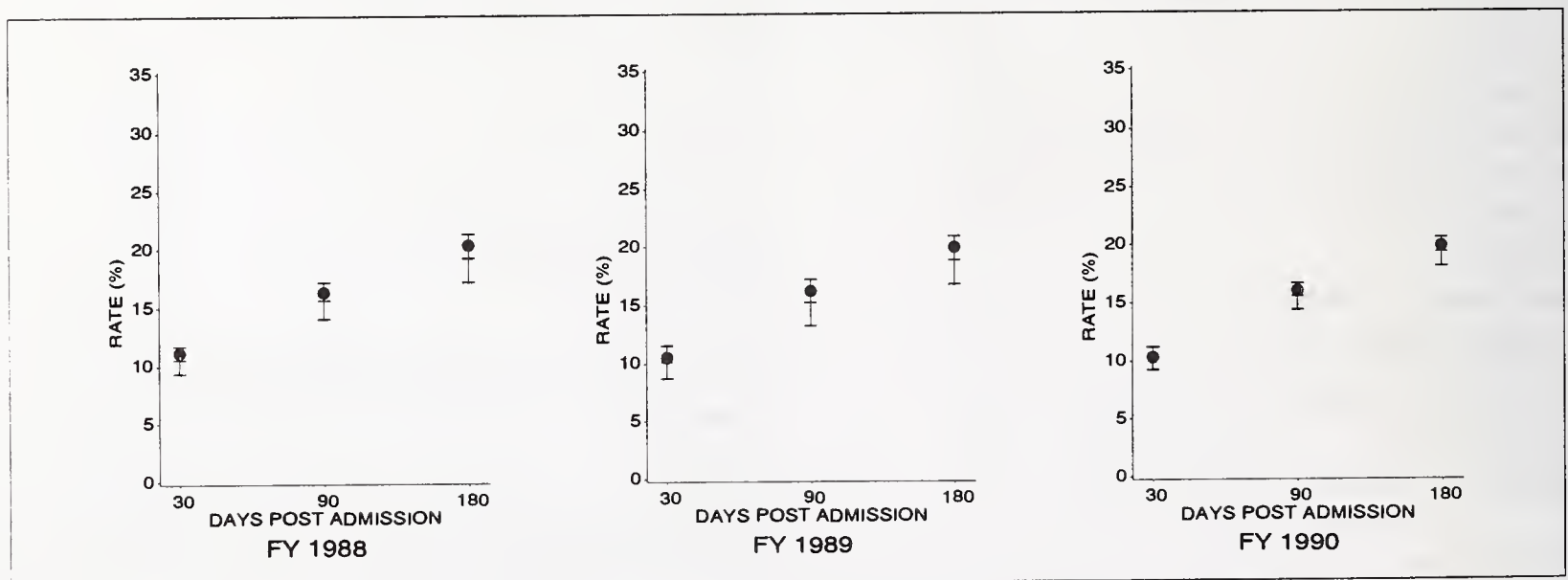
101 PAGE STREET  
NEW BEDFORD, MA 02740  
Medicare Provider Number: 220021

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 4571            | 10.3                | 10.2 | 0.5   | 16.0    | 15.5 | 0.6   | 19.8     | 19.3 | 0.6   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 197             | 24.9                | 27.6 | 4.1   | 31.5    | 30.8 | 3.5   | 33.0     | 33.5 | 3.4   |
| Congestive Heart Failure.....              | 308             | 16.6                | 14.8 | 3.0   | 26.0    | 23.6 | 4.6   | 32.5     | 30.0 | 4.6   |
| Pneumonia/Influenza.....                   | 307             | 17.9                | 19.6 | 2.4   | 26.1    | 26.5 | 2.6   | 30.0     | 30.8 | 2.7   |
| Chronic Obstructive Pulmonary Disease..... | 34              | 5.9                 | 9.0  | ----- | 11.8    | 15.3 | ----- | 14.7     | 20.6 | ----- |
| Transient Cerebral Ischemia.....           | 92              | 3.3                 | 2.4  | 2.5   | 6.5     | 5.2  | 4.8   | 6.5      | 8.3  | 5.0   |
| Stroke.....                                | 187             | 19.3                | 21.4 | 3.9   | 27.3    | 28.6 | 3.9   | 29.9     | 32.7 | 4.1   |
| Hip Fracture.....                          | 98              | 5.1                 | 7.0  | 2.8   | 10.2    | 12.6 | 4.2   | 11.2     | 16.4 | 5.1   |
| Sepsis.....                                | 28              | 14.3                | 20.4 | ----- | 21.4    | 27.6 | ----- | 25.0     | 32.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 29              | 6.9                 | 3.9  | ----- | 17.2    | 6.7  | ----- | 24.1     | 9.2  | ----- |
| Carotid Endarterectomy.....                | 9               | 0.0                 | 1.5  | ----- | 0.0     | 2.7  | ----- | 0.0      | 3.9  | ----- |
| Hip Replacement/Reconstruction.....        | 67              | 4.5                 | 4.2  | 2.5   | 7.5     | 8.0  | 3.8   | 7.5      | 10.8 | 5.3   |
| Open Reduction of Hip Fracture.....        | 36              | 0.0                 | 5.9  | ----- | 8.3     | 11.2 | ----- | 11.1     | 15.1 | ----- |
| Prostatectomy.....                         | 127             | 1.6                 | 0.9  | 1.0   | 3.1     | 2.2  | 1.6   | 4.7      | 3.7  | 2.4   |
| Cholecystectomy.....                       | 60              | 3.3                 | 2.1  | 2.7   | 3.3     | 4.0  | 3.2   | 3.3      | 5.6  | 4.1   |
| Hysterectomy.....                          | 37              | 0.0                 | 0.5  | ----- | 2.7     | 1.1  | ----- | 2.7      | 1.8  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



**ST LUKES HEALTHCARE INC**  
Medicare Provider Number: 220021

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 75.4 years  
Proportion female..... 55.6 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 27.4 %  
Transferred from skilled nursing facility..... 4.0 %  
Admitted for elective procedure..... 14.1 %  
Admitted for emergency..... 69.9 %

**COMORBIDITIES:**

Cancer..... 8.5 %  
Chronic cardiovascular disease..... 41.1 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 3.1 %  
Chronic pulmonary disease..... 12.9 %  
Cerebrovascular degeneration..... 4.6 %  
Diabetes mellitus..... 14.6 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 94.4%  
State ..... 4.4%  
Outside State ..... 1.2%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 11.9 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 475  
Occupancy Rate ..... 76.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 43.1 %  
Case Mix Index (CMI) ..... 1.1760

**STAFFING:**

Total Number of Physicians..... 147  
Percent of Physicians Board  
Certified Specialists ..... 78.9 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 355  
Licensed Practical Nurses ..... 110

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# ST LUKES HOSPITAL OF MIDDLEBOROUGH

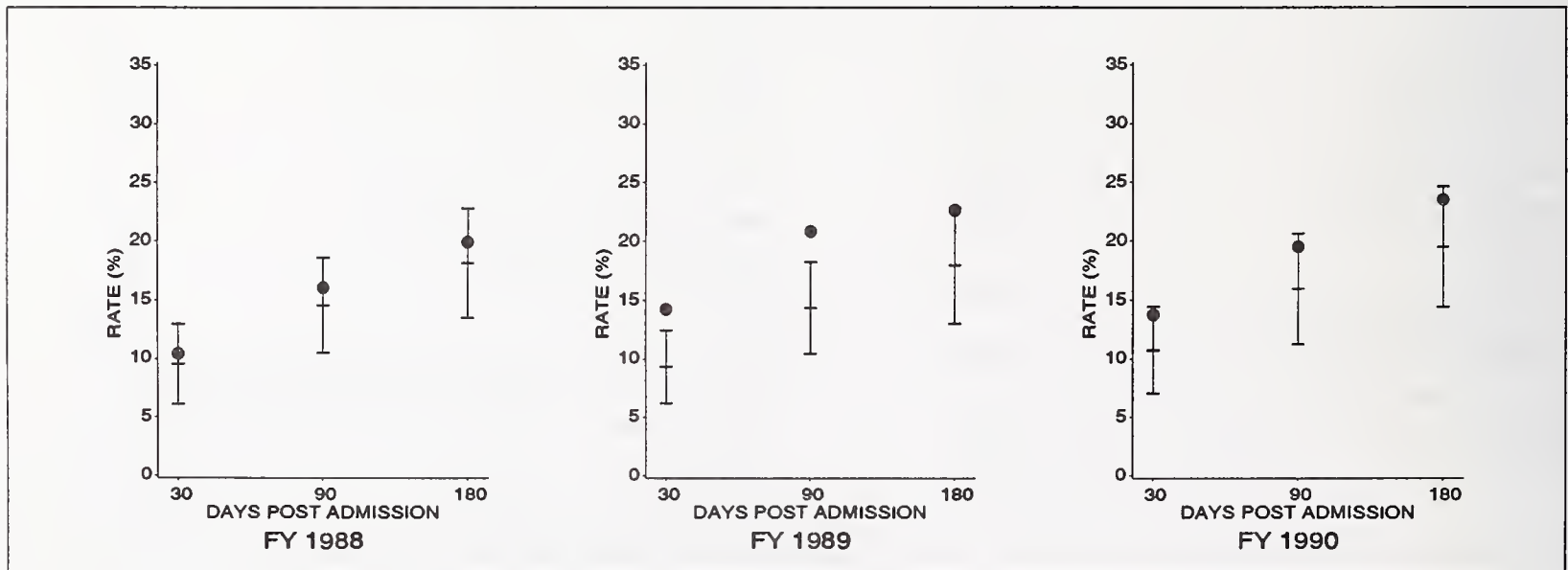
52 OAK ST  
MIDDLEBORO, MA 02346  
Medicare Provider Number: 220129

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 498             | 13.7                | 10.7 | 1.9   | 19.5    | 15.9 | 2.4   | 23.5     | 19.5 | 2.6   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 14              | 42.9                | 27.0 | ----- | 42.9    | 29.1 | ----- | 42.9     | 31.3 | ----- |
| Congestive Heart Failure.....              | 31              | 22.6                | 16.9 | ----- | 25.8    | 27.5 | ----- | 35.5     | 34.0 | ----- |
| Pneumonia/Influenza.....                   | 42              | 11.9                | 16.7 | ----- | 14.3    | 22.8 | ----- | 26.2     | 26.9 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 7               | 0.0                 | 6.7  | ----- | 0.0     | 12.1 | ----- | 0.0      | 16.1 | ----- |
| Transient Cerebral Ischemia.....           | 9               | 0.0                 | 1.8  | ----- | 0.0     | 4.2  | ----- | 11.1     | 6.9  | ----- |
| Stroke.....                                | 19              | 21.1                | 18.5 | ----- | 36.8    | 27.0 | ----- | 36.8     | 31.3 | ----- |
| Hip Fracture.....                          | 19              | 26.3                | 7.9  | ----- | 31.6    | 13.5 | ----- | 31.6     | 17.1 | ----- |
| Sepsis.....                                | 4               | 50.0                | 31.1 | ----- | 50.0    | 40.0 | ----- | 50.0     | 44.8 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 4               | 0.0                 | 1.0  | ----- | 0.0     | 2.3  | ----- | 0.0      | 3.6  | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 7               | 14.3                | 3.9  | ----- | 14.3    | 7.6  | ----- | 14.3     | 10.0 | ----- |
| Open Reduction of Hip Fracture.....        | 9               | 44.4                | 10.0 | ----- | 44.4    | 17.0 | ----- | 44.4     | 21.3 | ----- |
| Prostatectomy.....                         | 9               | 0.0                 | 0.8  | ----- | 0.0     | 1.8  | ----- | 0.0      | 3.0  | ----- |
| Cholecystectomy.....                       | 7               | 0.0                 | 0.8  | ----- | 0.0     | 1.6  | ----- | 14.3     | 2.3  | ----- |
| Hysterectomy.....                          | 3               | 0.0                 | 0.3  | ----- | 0.0     | 0.8  | ----- | 0.0      | 1.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ST LUKES HOSPITAL OF MIDDLEBOROUGH

Medicare Provider Number: 220129

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 78.7 years  
Proportion female..... 62.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 50.8 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 12.9 %  
Admitted for emergency..... 45.2 %

### COMORBIDITIES:

Cancer..... 4.4 %  
Chronic cardiovascular disease..... 26.9 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 1.2 %  
Chronic pulmonary disease..... 11.8 %  
Cerebrovascular degeneration..... 7.2 %  
Diabetes mellitus..... 7.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 79.6%  
State..... 17.8%  
Outside State..... 2.6%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 7.3 Days  
State..... 10.1 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 55  
Ownership/Control..... Private, Non-Profit  
Case Mix Index (CMI)..... 1.0709

### STAFFING:

Medical Residents/Interns..... 0  
Registered Nurses..... 39  
Licensed Practical Nurses..... 24

### SPECIALTY SERVICES:

Burn Unit..... No  
Coronary Care Unit..... No  
Hospice Care..... No  
Intensive Care Unit..... Yes  
Organ Transplant..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ST MARGARETS HOSPITAL FOR WOMEN

90 CUSHING AVE  
DORCHESTER, MA 02122  
Medicare Provider Number: 220102

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 11                 | 0.0                 | 0.2  | ----- | 9.1     | 0.5  | ----- | 9.1      | 0.8  | ----- |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Congestive Heart Failure.....              | 0                  |                     |      |       |         |      |       |          |      |       |
| Pneumonia/Influenza.....                   | 0                  |                     |      |       |         |      |       |          |      |       |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |       |         |      |       |          |      |       |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Stroke.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Fracture.....                          | 0                  |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0                  |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 0                  |                     |      |       |         |      |       |          |      |       |
| Hysterectomy.....                          | 1                  | 0.0                 | 0.0  | ----- | 0.0     | 0.1  | ----- | 0.0      | 0.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES

No Graphs are presented when the standard deviation  
was not computed for one or more of the three fiscal years,  
(1988, 1989, or 1990)



# ST MARGARETS HOSPITAL FOR WOMEN

Medicare Provider Number: 220102

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 50.9 years  
Proportion female..... 100.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 100.0 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 18.2 %  
Admitted for emergency..... 9.1 %

### COMORBIDITIES:

Cancer..... 0.0 %  
Chronic cardiovascular disease..... 0.0 %  
Chronic liver disease..... 0.0 %  
Chronic renal disease..... 0.0 %  
Chronic pulmonary disease..... 0.0 %  
Cerebrovascular degeneration..... 0.0 %  
Diabetes mellitus..... 0.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 57.2%  
State ..... 35.7%  
Outside State ..... 7.1%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 4.3 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 108  
Occupancy Rate ..... 65.0 %  
Ownership/Control..... Church  
Medicare Discharges ..... 0.3 %  
Case Mix Index (CMI) ..... 0.6121

### STAFFING:

Total Number of Physicians..... 121  
Percent of Physicians Board  
Certified Specialists ..... 85.1 %  
Medical Residents/Interns ..... 20  
Registered Nurses..... 177  
Licensed Practical Nurses ..... 8

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ST VINCENT HOSPITAL

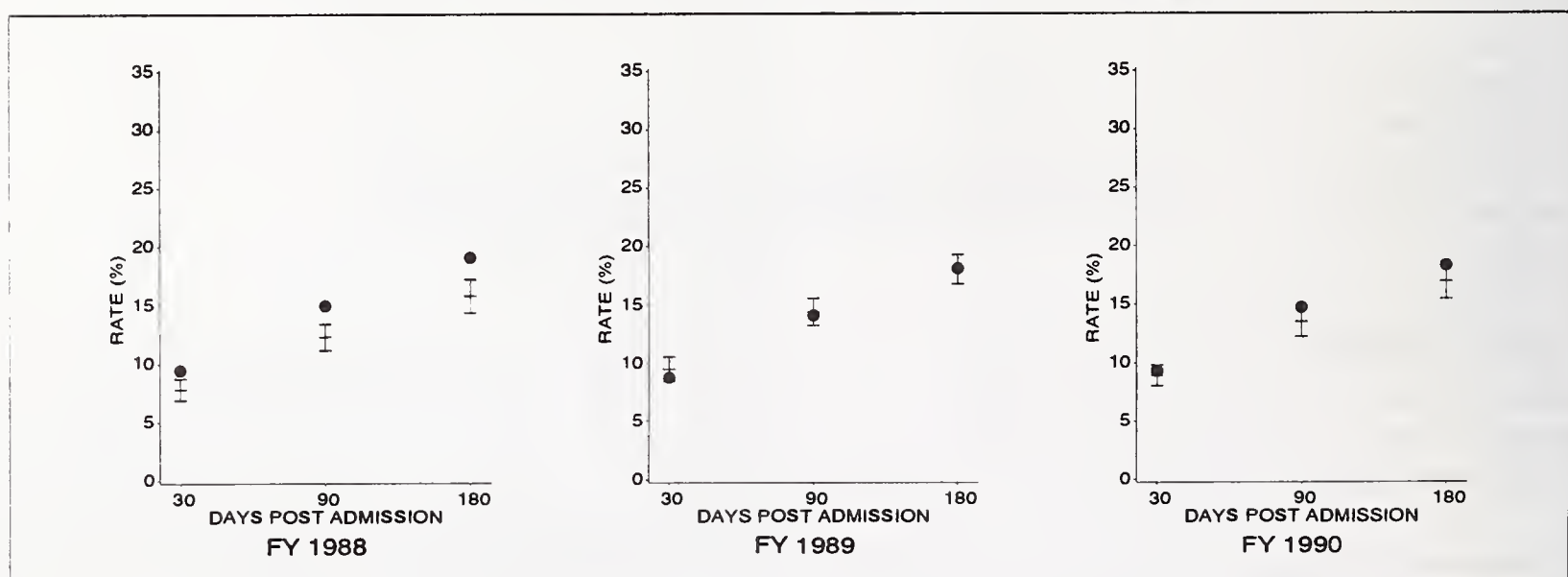
25 WINTHROP STREET  
WORCESTER, MA 01604  
Medicare Provider Number: 220028

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 4419            | 9.3                 | 8.9  | 0.5   | 14.7    | 13.5 | 0.7   | 18.3     | 16.9 | 0.7   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 157             | 29.9                | 23.3 | 5.6   | 33.8    | 26.0 | 6.0   | 34.4     | 28.5 | 5.2   |
| Congestive Heart Failure.....              | 212             | 15.1                | 15.2 | 2.8   | 23.1    | 23.5 | 3.3   | 28.3     | 29.5 | 3.4   |
| Pneumonia/Influenza.....                   | 168             | 16.7                | 17.7 | 3.1   | 26.8    | 24.5 | 4.0   | 31.5     | 28.9 | 4.6   |
| Chronic Obstructive Pulmonary Disease..... | 41              | 12.2                | 5.4  | ----- | 19.5    | 9.9  | ----- | 22.0     | 14.1 | ----- |
| Transient Cerebral Ischemia.....           | 29              | 0.0                 | 1.4  | ----- | 3.4     | 3.2  | ----- | 3.4      | 5.2  | ----- |
| Stroke.....                                | 146             | 21.2                | 20.8 | 3.6   | 28.1    | 27.2 | 3.9   | 31.5     | 30.9 | 3.8   |
| Hip Fracture.....                          | 118             | 10.2                | 6.7  | 3.1   | 15.3    | 11.7 | 4.9   | 21.2     | 15.2 | 5.1   |
| Sepsis.....                                | 31              | 32.3                | 19.1 | ----- | 35.5    | 25.7 | ----- | 38.7     | 30.0 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 25              | 0.0                 | 2.4  | ----- | 0.0     | 3.3  | ----- | 4.0      | 4.2  | ----- |
| Coronary Artery Bypass Graft.....          | 67              | 7.5                 | 5.9  | 3.2   | 9.0     | 8.7  | 3.5   | 9.0      | 9.8  | 3.7   |
| Initial Pacemaker Insertion.....           | 39              | 12.8                | 3.8  | ----- | 15.4    | 7.1  | ----- | 15.4     | 10.1 | ----- |
| Carotid Endarterectomy.....                | 18              | 0.0                 | 1.1  | ----- | 0.0     | 2.0  | ----- | 0.0      | 2.9  | ----- |
| Hip Replacement/Reconstruction.....        | 76              | 6.6                 | 3.5  | 4.2   | 7.9     | 6.3  | 4.3   | 10.5     | 8.4  | 6.2   |
| Open Reduction of Hip Fracture.....        | 44              | 4.5                 | 6.4  | ----- | 13.6    | 11.9 | ----- | 20.5     | 15.8 | ----- |
| Prostatectomy.....                         | 182             | 0.5                 | 0.8  | 0.9   | 2.2     | 2.0  | 1.4   | 3.8      | 3.5  | 2.5   |
| Cholecystectomy.....                       | 84              | 3.6                 | 2.3  | 2.1   | 3.6     | 4.3  | 2.5   | 3.6      | 5.9  | 3.3   |
| Hysterectomy.....                          | 29              | 0.0                 | 0.9  | ----- | 3.4     | 2.1  | ----- | 3.4      | 3.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ST VINCENT HOSPITAL

Medicare Provider Number: 220028

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.0 years  
Proportion female..... 52.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 35.1 %  
Transferred from skilled nursing facility..... 0.2 %  
Admitted for elective procedure..... 24.7 %  
Admitted for emergency..... 73.3 %

### COMORBIDITIES:

Cancer..... 8.6 %  
Chronic cardiovascular disease..... 31.7 %  
Chronic liver disease..... 0.7 %  
Chronic renal disease..... 1.9 %  
Chronic pulmonary disease..... 10.7 %  
Cerebrovascular degeneration..... 4.8 %  
Diabetes mellitus..... 5.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 93.8%  
State ..... 4.5%  
Outside State ..... 1.7%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 11.1 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 416  
Occupancy Rate ..... 72.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 22.3 %  
Case Mix Index (CMI) ..... 1.3318

### STAFFING:

Total Number of Physicians..... (Not Available)  
Percent of Physicians Board  
Certified Specialists ..... (Not Available)  
Medical Residents/Interns ..... (Not Available)  
Registered Nurses..... (Not Available)  
Licensed Practical Nurses ..... (Not Available)

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# STILLMAN INFIRMARY-HARVARD UNIVERSITY

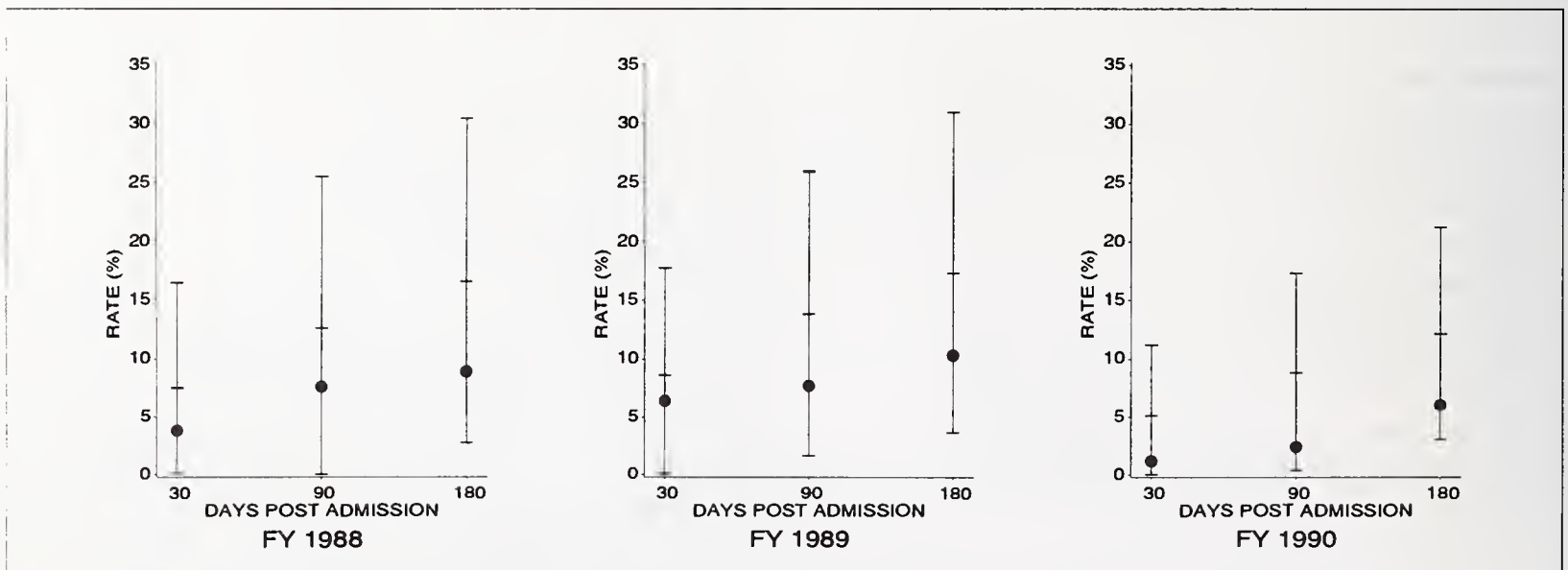
75 MT AUBURN ST  
CAMBRIDGE, MA 02138  
Medicare Provider Number: 220133

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 84              | 1.2                 | 5.1  | 3.0   | 2.4     | 8.8  | 4.2   | 6.0      | 12.1 | 4.6   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Congestive Heart Failure.....              | 0               |                     |      |       |         |      |       |          |      |       |
| Pneumonia/Influenza.....                   | 4               | 0.0                 | 10.2 | ----- | 0.0     | 14.5 | ----- | 0.0      | 18.2 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 0               |                     |      |       |         |      |       |          |      |       |
| Transient Cerebral Ischemia.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Stroke.....                                | 1               | 0.0                 | 18.4 | ----- | 0.0     | 24.5 | ----- | 0.0      | 28.7 | ----- |
| Hip Fracture.....                          | 0               |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 0               |                     |      |       |         |      |       |          |      |       |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0               |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 0               |                     |      |       |         |      |       |          |      |       |
| Hysterectomy.....                          | 0               |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# STILLMAN INFIRMARY-HARVARD UNIVERSITY

Medicare Provider Number: 220133

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 79.9 years  
Proportion female..... 59.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 22.6 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 2.4 %  
Admitted for emergency..... 1.2 %

### COMORBIDITIES:

Cancer..... 6.0 %  
Chronic cardiovascular disease..... 13.1 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 0.0 %  
Chronic pulmonary disease..... 7.1 %  
Cerebrovascular degeneration..... 2.4 %  
Diabetes mellitus..... 7.1 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 75.9%  
State ..... 22.3%  
Outside State ..... 1.8%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 5.3 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 33  
Ownership/Control..... Private, Non-Profit  
Case Mix Index (CMI) ..... 0.7297

### STAFFING:

Medical Residents/Interns ..... 37  
Registered Nurses..... 33  
Licensed Practical Nurses ..... 0

### SPECIALTY SERVICES:

Burn Unit ..... No  
Coronary Care Unit ..... No  
Hospice Care ..... No  
Intensive Care Unit ..... No  
Organ Transplant ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# STURDY MEMORIAL HOSPITAL

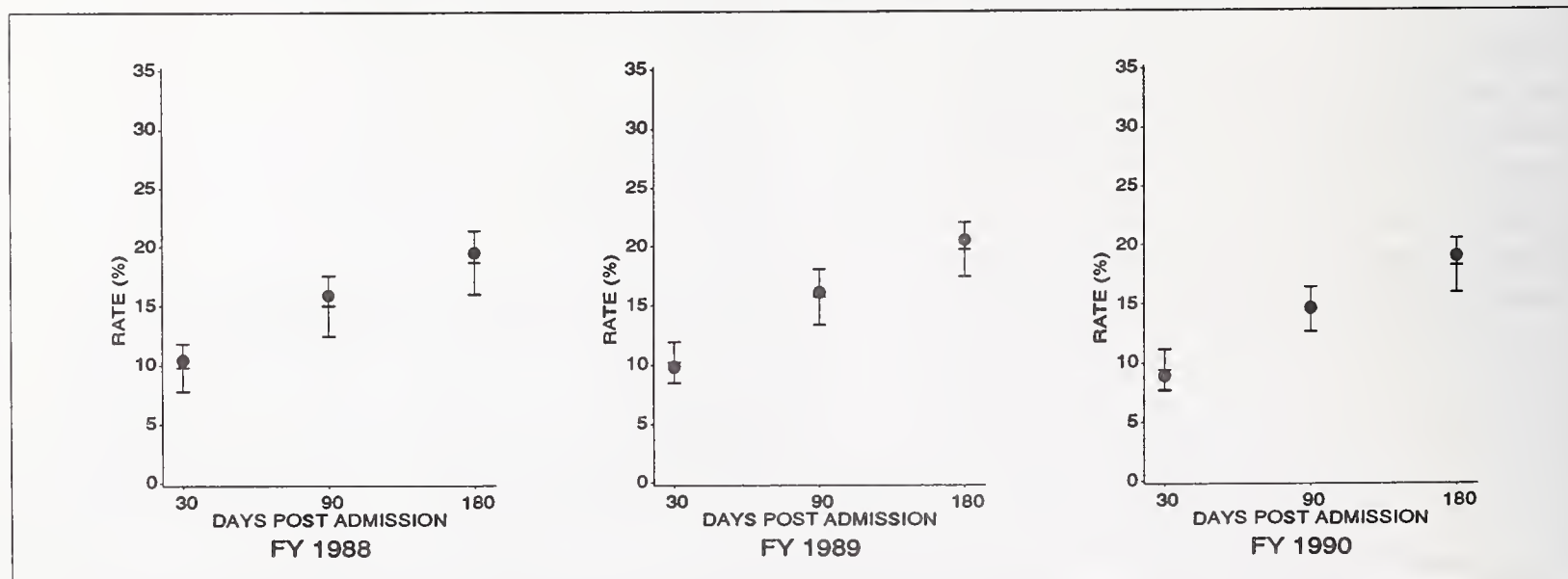
211 PARK STREET  
ATTLEBORO, MA 02703  
Medicare Provider Number: 220008

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1669            | 8.9                 | 9.4  | 0.9   | 14.6    | 14.5 | 1.0   | 19.0     | 18.2 | 1.2   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 61              | 32.8                | 23.9 | 7.7   | 36.1    | 27.2 | 7.6   | 37.7     | 29.9 | 7.1   |
| Congestive Heart Failure.....              | 112             | 13.4                | 15.3 | 3.9   | 22.3    | 24.1 | 4.3   | 32.1     | 30.4 | 4.7   |
| Pneumonia/Influenza.....                   | 80              | 8.7                 | 16.6 | 6.6   | 17.5    | 22.8 | 5.8   | 22.5     | 26.8 | 5.6   |
| Chronic Obstructive Pulmonary Disease..... | 44              | 2.3                 | 9.1  | ----- | 11.4    | 15.5 | ----- | 18.2     | 20.2 | ----- |
| Transient Cerebral Ischemia.....           | 19              | 0.0                 | 2.2  | ----- | 10.5    | 4.9  | ----- | 15.8     | 8.0  | ----- |
| Stroke.....                                | 68              | 13.2                | 15.8 | 6.6   | 14.7    | 22.6 | 8.6   | 23.5     | 26.4 | 6.8   |
| Hip Fracture.....                          | 53              | 3.8                 | 6.8  | 4.3   | 9.4     | 12.1 | 5.0   | 15.1     | 15.5 | 5.5   |
| Sepsis.....                                | 29              | 24.1                | 28.9 | ----- | 41.4    | 38.3 | ----- | 48.3     | 43.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 16              | 12.5                | 3.7  | ----- | 12.5    | 7.4  | ----- | 12.5     | 10.8 | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 25              | 4.0                 | 4.9  | ----- | 12.0    | 9.1  | ----- | 20.0     | 12.1 | ----- |
| Open Reduction of Hip Fracture.....        | 29              | 3.4                 | 5.8  | ----- | 6.9     | 10.6 | ----- | 6.9      | 13.7 | ----- |
| Prostatectomy.....                         | 43              | 0.0                 | 1.0  | ----- | 2.3     | 2.5  | ----- | 11.6     | 4.3  | ----- |
| Cholecystectomy.....                       | 25              | 0.0                 | 2.3  | ----- | 4.0     | 4.0  | ----- | 4.0      | 5.4  | ----- |
| Hysterectomy.....                          | 20              | 0.0                 | 0.3  | ----- | 0.0     | 0.6  | ----- | 0.0      | 1.0  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# STURDY MEMORIAL HOSPITAL

Medicare Provider Number: 220008

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.9 years  
Proportion female..... 58.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 33.9 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 11.4 %  
Admitted for emergency..... 11.2 %

### COMORBIDITIES:

Cancer..... 8.0 %  
Chronic cardiovascular disease..... 47.4 %  
Chronic liver disease..... 1.3 %  
Chronic renal disease..... 1.7 %  
Chronic pulmonary disease..... 14.7 %  
Cerebrovascular degeneration..... 5.0 %  
Diabetes mellitus..... 12.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 87.1%  
State ..... 9.3%  
Outside State ..... 3.6%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.2 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 150  
Occupancy Rate ..... 76.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 38.6 %  
Case Mix Index (CMI) ..... 1.2061

### STAFFING:

Total Number of Physicians..... 92  
Percent of Physicians Board  
Certified Specialists ..... 69.6 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 144  
Licensed Practical Nurses ..... 27

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# THE CAMBRIDGE HOSPITAL

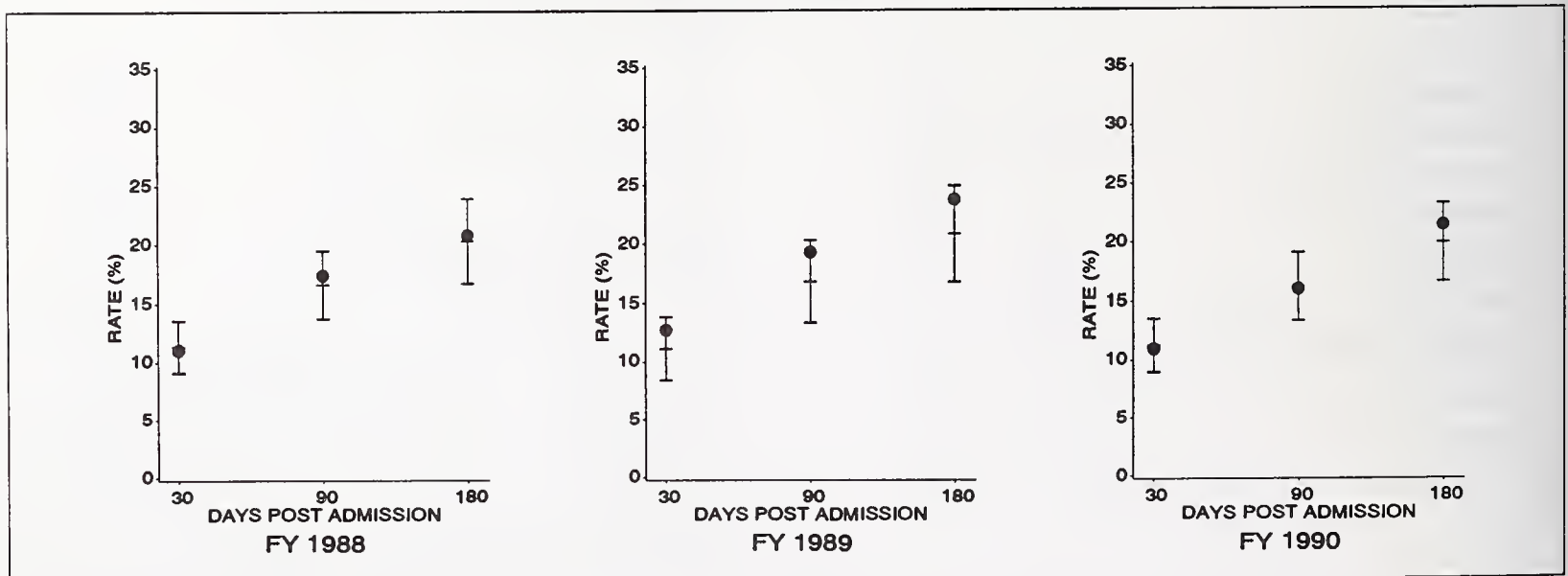
1493 CAMBRIDGE ST  
CAMBRIDGE, MA 02138  
Medicare Provider Number: 220011

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 774             | 10.9                | 11.2 | 1.1   | 16.0    | 16.2 | 1.5   | 21.4     | 19.9 | 1.7   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 24              | 45.8                | 27.8 | ----- | 45.8    | 29.8 | ----- | 50.0     | 31.9 | ----- |
| Congestive Heart Failure.....              | 55              | 9.1                 | 14.5 | 6.2   | 18.2    | 22.7 | 8.2   | 25.5     | 29.2 | 7.7   |
| Pneumonia/Influenza.....                   | 44              | 18.2                | 20.6 | ----- | 25.0    | 27.8 | ----- | 36.4     | 32.5 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 9               | 0.0                 | 8.1  | ----- | 0.0     | 13.8 | ----- | 11.1     | 18.4 | ----- |
| Transient Cerebral Ischemia.....           | 3               | 0.0                 | 0.8  | ----- | 0.0     | 2.0  | ----- | 0.0      | 3.5  | ----- |
| Stroke.....                                | 25              | 4.0                 | 21.4 | ----- | 12.0    | 28.5 | ----- | 16.0     | 32.6 | ----- |
| Hip Fracture.....                          | 27              | 7.4                 | 7.8  | ----- | 14.8    | 13.7 | ----- | 25.9     | 17.7 | ----- |
| Sepsis.....                                | 7               | 14.3                | 19.1 | ----- | 14.3    | 24.2 | ----- | 28.6     | 28.1 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 1               | 0.0                 | 3.4  | ----- | 0.0     | 5.4  | ----- | 0.0      | 8.2  | ----- |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 10              | 0.0                 | 2.8  | ----- | 0.0     | 6.1  | ----- | 0.0      | 9.4  | ----- |
| Carotid Endarterectomy.....                | 1               | 0.0                 | 2.1  | ----- | 0.0     | 4.1  | ----- | 0.0      | 5.4  | ----- |
| Hip Replacement/Reconstruction.....        | 11              | 0.0                 | 3.7  | ----- | 0.0     | 7.2  | ----- | 9.1      | 10.0 | ----- |
| Open Reduction of Hip Fracture.....        | 20              | 10.0                | 7.7  | ----- | 20.0    | 14.3 | ----- | 30.0     | 18.9 | ----- |
| Prostatectomy.....                         | 11              | 0.0                 | 2.6  | ----- | 9.1     | 5.9  | ----- | 9.1      | 8.9  | ----- |
| Cholecystectomy.....                       | 10              | 0.0                 | 3.3  | ----- | 0.0     | 6.4  | ----- | 10.0     | 8.5  | ----- |
| Hysterectomy.....                          | 4               | 0.0                 | 0.1  | ----- | 0.0     | 0.3  | ----- | 0.0      | 0.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# THE CAMBRIDGE HOSPITAL

Medicare Provider Number: 220011

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.7 years  
Proportion female..... 61.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 15.2 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 7.5 %  
Admitted for emergency..... 82.2 %

### COMORBIDITIES:

Cancer..... 4.8 %  
Chronic cardiovascular disease..... 29.6 %  
Chronic liver disease..... 2.3 %  
Chronic renal disease..... 2.3 %  
Chronic pulmonary disease..... 14.1 %  
Cerebrovascular degeneration..... 13.4 %  
Diabetes mellitus..... 8.1 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 87.7%  
State ..... 10.6%  
Outside State ..... 1.7%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 11.3 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 169  
Occupancy Rate ..... 71.0 %  
Ownership/Control..... Local Government  
Medicare Discharges ..... 25.3 %  
Case Mix Index (CMI) ..... 1.2577

### STAFFING:

Total Number of Physicians..... 169  
Percent of Physicians Board  
Certified Specialists..... 72.2 %  
Medical Residents/Interns ..... 33  
Registered Nurses..... 152  
Licensed Practical Nurses ..... 9

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# THE CLINTON HOSPITAL

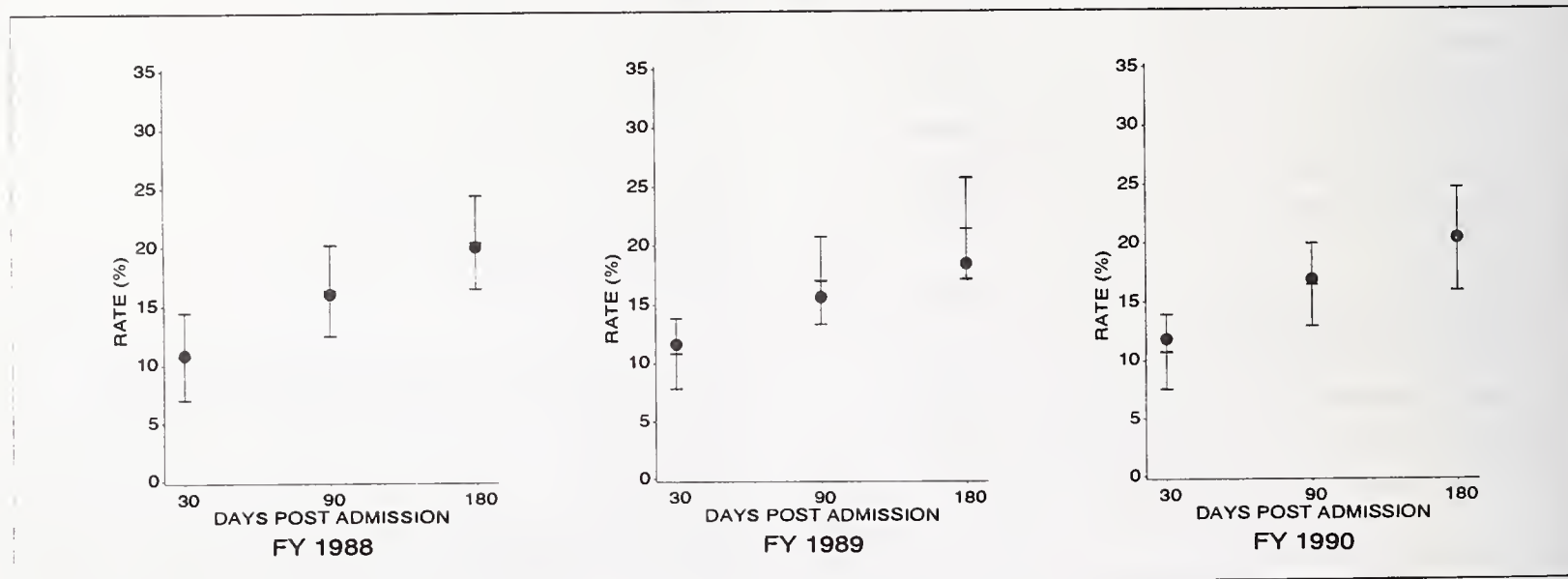
201 HIGHLAND ST  
CLINTON, MA 01510  
Medicare Provider Number: 220058

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 485             | 11.8                | 10.7 | 1.6   | 16.9    | 16.4 | 1.8   | 20.4     | 20.3 | 2.2   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 17              | 17.6                | 23.0 | ----- | 17.6    | 26.9 | ----- | 17.6     | 29.8 | ----- |
| Congestive Heart Failure.....              | 33              | 15.2                | 17.6 | ----- | 27.3    | 28.4 | ----- | 33.3     | 35.8 | ----- |
| Pneumonia/Influenza.....                   | 40              | 20.0                | 19.7 | ----- | 25.0    | 27.8 | ----- | 27.5     | 32.3 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 3               | 0.0                 | 4.7  | ----- | 0.0     | 8.4  | ----- | 33.3     | 12.2 | ----- |
| Transient Cerebral Ischemia.....           | 10              | 0.0                 | 1.5  | ----- | 0.0     | 3.5  | ----- | 0.0      | 5.9  | ----- |
| Stroke.....                                | 18              | 38.9                | 17.6 | ----- | 50.0    | 24.5 | ----- | 55.6     | 28.5 | ----- |
| Hip Fracture.....                          | 11              | 9.1                 | 7.2  | ----- | 9.1     | 14.1 | ----- | 18.2     | 19.1 | ----- |
| Sepsis.....                                | 12              | 25.0                | 24.4 | ----- | 33.3    | 33.8 | ----- | 41.7     | 38.9 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 3               | 0.0                 | 1.5  | ----- | 0.0     | 3.4  | ----- | 0.0      | 5.6  | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 7               | 14.3                | 4.3  | ----- | 14.3    | 8.7  | ----- | 14.3     | 12.0 | ----- |
| Prostatectomy.....                         | 12              | 0.0                 | 0.8  | ----- | 0.0     | 2.1  | ----- | 0.0      | 3.9  | ----- |
| Cholecystectomy.....                       | 0               |                     |      |       |         |      |       |          |      |       |
| Hysterectomy.....                          | 6               | 0.0                 | 0.1  | ----- | 0.0     | 0.4  | ----- | 0.0      | 0.7  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# THE CLINTON HOSPITAL

Medicare Provider Number: 220058

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 78.8 years  
Proportion female..... 64.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 33.4 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 7.6 %  
Admitted for emergency..... 52.2 %

### COMORBIDITIES:

Cancer..... 8.7 %  
Chronic cardiovascular disease..... 34.0 %  
Chronic liver disease..... 0.6 %  
Chronic renal disease..... 3.7 %  
Chronic pulmonary disease..... 14.2 %  
Cerebrovascular degeneration..... 6.2 %  
Diabetes mellitus..... 14.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 95.5%  
State ..... 3.1%  
Outside State ..... 1.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.4 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 56  
Occupancy Rate ..... 74.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges .....(Not Available)  
Case Mix Index (CMI) ..... 1.0310

### STAFFING:

Total Number of Physicians..... 12  
Percent of Physicians Board  
Certified Specialists..... 66.7 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 58  
Licensed Practical Nurses..... 12

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# THE COOLEY DICKINSON HOSPITAL INC

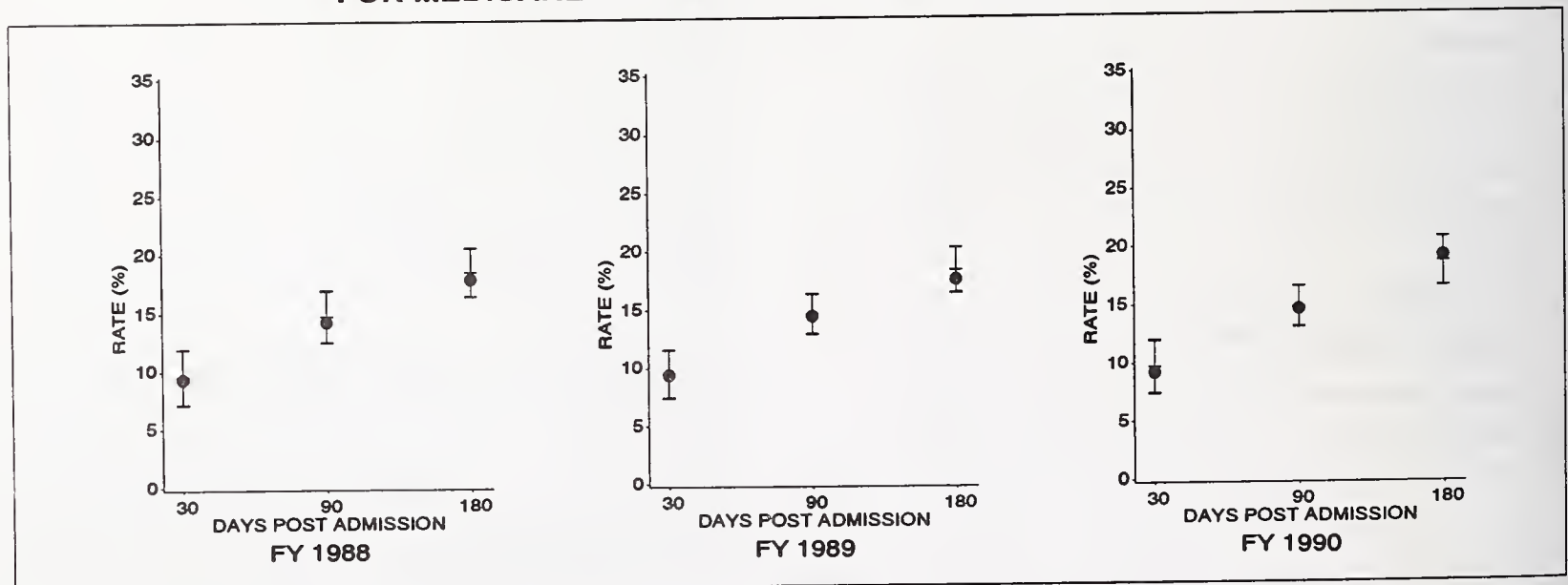
30 LOCUST ST  
NORTHAMPTON, MA 01060  
Medicare Provider Number: 220015

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1711            | 9.2                 | 9.7  | 1.1   | 14.6    | 14.8 | 0.9   | 19.1     | 18.6 | 1.1   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 60              | 11.7                | 22.5 | 8.8   | 13.3    | 25.7 | 9.0   | 18.3     | 28.3 | 8.9   |
| Congestive Heart Failure.....              | 84              | 10.7                | 16.3 | 7.0   | 22.6    | 25.4 | 6.9   | 29.8     | 32.4 | 6.0   |
| Pneumonia/Influenza.....                   | 84              | 16.7                | 17.9 | 4.5   | 20.2    | 24.2 | 6.3   | 22.6     | 28.1 | 7.1   |
| Chronic Obstructive Pulmonary Disease..... | 16              | 6.3                 | 6.6  | ----- | 18.8    | 12.5 | ----- | 31.3     | 17.1 | ----- |
| Transient Cerebral Ischemia.....           | 15              | 0.0                 | 1.4  | ----- | 0.0     | 3.2  | ----- | 0.0      | 5.4  | ----- |
| Stroke.....                                | 70              | 20.0                | 19.4 | 5.0   | 28.6    | 27.0 | 5.6   | 32.9     | 31.1 | 5.8   |
| Hip Fracture.....                          | 50              | 6.0                 | 7.6  | ----- | 6.0     | 13.4 | ----- | 12.0     | 17.6 | ----- |
| Sepsis.....                                | 19              | 10.5                | 24.0 | ----- | 10.5    | 30.2 | ----- | 15.8     | 34.8 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker insertion.....           | 17              | 0.0                 | 4.3  | ----- | 5.9     | 8.1  | ----- | 11.8     | 11.5 | ----- |
| Carotid Endarterectomy.....                | 1               | 0.0                 | 1.0  | ----- | 0.0     | 1.9  | ----- | 0.0      | 2.8  | ----- |
| Hip Replacement/Reconstruction.....        | 43              | 2.3                 | 3.5  | ----- | 2.3     | 6.2  | ----- | 2.3      | 8.3  | ----- |
| Open Reduction of Hip Fracture.....        | 19              | 5.3                 | 7.8  | ----- | 5.3     | 14.5 | ----- | 15.8     | 19.2 | ----- |
| Prostatectomy.....                         | 35              | 2.9                 | 1.6  | ----- | 8.6     | 3.9  | ----- | 11.4     | 6.6  | ----- |
| Cholecystectomy.....                       | 41              | 7.3                 | 4.2  | ----- | 14.6    | 7.7  | ----- | 14.6     | 10.1 | ----- |
| Hysterectomy.....                          | 15              | 6.7                 | 1.1  | ----- | 6.7     | 2.5  | ----- | 6.7      | 3.9  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# THE COOLEY DICKINSON HOSPITAL INC

Medicare Provider Number: 220015

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.7 years  
Proportion female..... 61.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 35.7 %  
Transferred from skilled nursing facility..... 2.8 %  
Admitted for elective procedure..... 15.4 %  
Admitted for emergency..... 60.9 %

### COMORBIDITIES:

Cancer..... 9.3 %  
Chronic cardiovascular disease..... 35.7 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 2.2 %  
Chronic pulmonary disease..... 16.0 %  
Cerebrovascular degeneration..... 6.5 %  
Diabetes mellitus..... 9.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 86.0%  
State ..... 10.6%  
Outside State ..... 3.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.5 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 211  
Occupancy Rate ..... 57.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 34.3 %  
Case Mix Index (CMI) ..... 1.2020

### STAFFING:

Total Number of Physicians..... 129  
Percent of Physicians Board  
Certified Specialists ..... 81.4 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 215  
Licensed Practical Nurses ..... 54

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

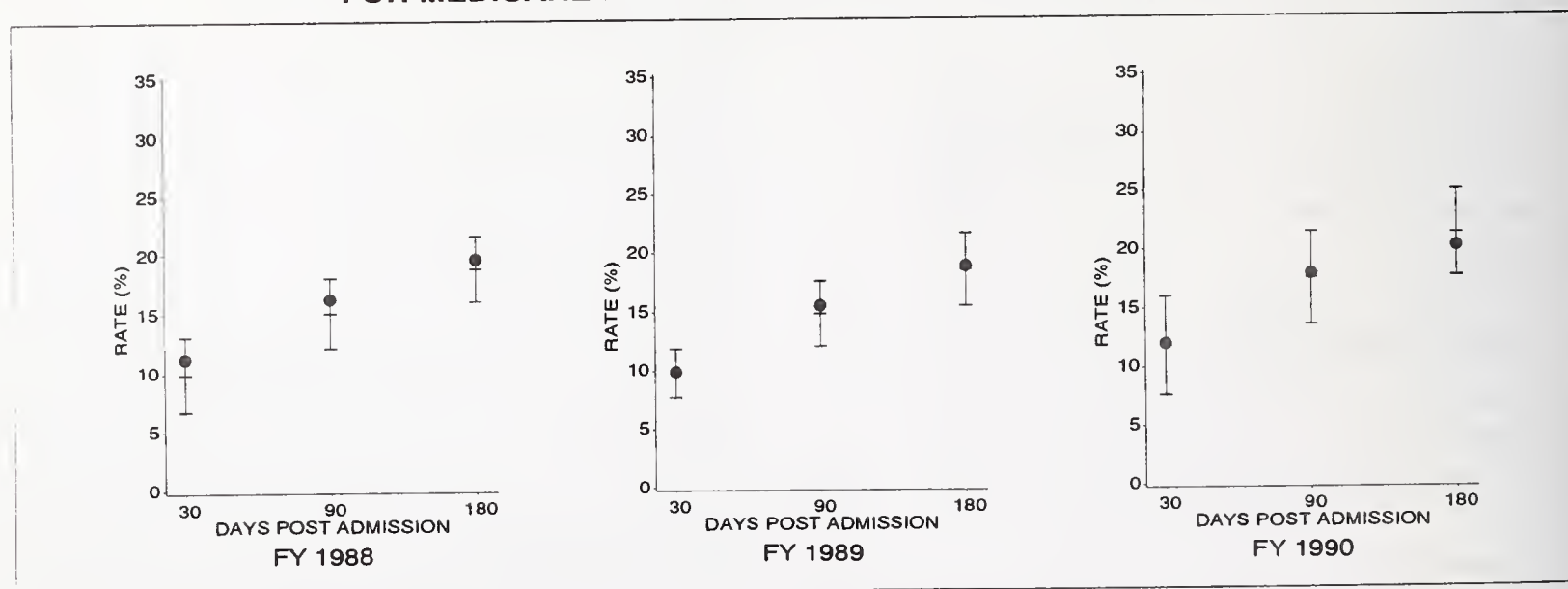
**THE HUNT HOSPITAL**  
75 LINDALL ST  
DANVERS, MA 01923  
Medicare Provider Number: 220040

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 743                | 12.0                | 11.8 | 2.1   | 17.9    | 17.5 | 2.0   | 20.2     | 21.3 | 1.8   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 33                 | 27.3                | 28.7 | ----- | 39.4    | 31.5 | ----- | 42.4     | 34.0 | ----- |
| Congestive Heart Failure.....              | 38                 | 23.7                | 17.0 | ----- | 39.5    | 26.3 | ----- | 42.1     | 32.1 | ----- |
| Pneumonia/Influenza.....                   | 56                 | 25.0                | 18.4 | 7.8   | 32.1    | 25.5 | 8.1   | 37.5     | 29.6 | 9.3   |
| Chronic Obstructive Pulmonary Disease..... | 7                  | 28.6                | 12.1 | ----- | 28.6    | 22.3 | ----- | 42.9     | 29.2 | ----- |
| Transient Cerebral Ischemia.....           | 23                 | 0.0                 | 2.3  | ----- | 4.3     | 5.2  | ----- | 8.7      | 8.1  | ----- |
| Stroke.....                                | 33                 | 24.2                | 22.9 | ----- | 33.3    | 30.8 | ----- | 33.3     | 34.5 | ----- |
| Hip Fracture.....                          | 18                 | 0.0                 | 6.6  | ----- | 0.0     | 12.4 | ----- | 0.0      | 16.0 | ----- |
| Sepsis.....                                | 10                 | 30.0                | 18.3 | ----- | 40.0    | 27.7 | ----- | 40.0     | 32.2 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 6                  | 0.0                 | 3.1  | ----- | 0.0     | 5.9  | ----- | 0.0      | 8.0  | ----- |
| Carotid Endarterectomy.....                | 2                  | 0.0                 | 2.5  | ----- | 0.0     | 4.4  | ----- | 0.0      | 5.7  | ----- |
| Hip Replacement/Reconstruction.....        | 14                 | 0.0                 | 3.0  | ----- | 0.0     | 5.7  | ----- | 0.0      | 7.5  | ----- |
| Open Reduction of Hip Fracture.....        | 11                 | 0.0                 | 6.0  | ----- | 0.0     | 11.8 | ----- | 0.0      | 15.6 | ----- |
| Prostatectomy.....                         | 27                 | 0.0                 | 1.4  | ----- | 3.7     | 3.4  | ----- | 7.4      | 5.7  | ----- |
| Cholecystectomy.....                       | 4                  | 0.0                 | 2.0  | ----- | 0.0     | 3.9  | ----- | 0.0      | 5.4  | ----- |
| Hysterectomy.....                          | 4                  | 0.0                 | 0.1  | ----- | 0.0     | 0.3  | ----- | 0.0      | 0.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



**THE HUNT HOSPITAL**  
Medicare Provider Number: 220040

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 76.1 years  
Proportion female..... 61.6 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 37.1 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 12.2 %  
Admitted for emergency..... 59.1 %

**COMORBIDITIES:**

Cancer..... 7.5 %  
Chronic cardiovascular disease..... 38.8 %  
Chronic liver disease..... 0.7 %  
Chronic renal disease..... 3.1 %  
Chronic pulmonary disease..... 22.9 %  
Cerebrovascular degeneration..... 8.9 %  
Diabetes mellitus..... 6.1 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 90.4%  
State ..... 6.6%  
Outside State ..... 3.0%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 11.0 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 117  
Ownership/Control..... Local Government  
Case Mix Index (CMI) ..... 1.2819

**STAFFING:**

Medical Residents/Interns ..... 0  
Registered Nurses ..... 122  
Licensed Practical Nurses ..... 15

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Coronary Care Unit ..... No  
Hospice Care ..... No  
Intensive Care Unit ..... Yes  
Organ Transplant ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# THE MALDEN HOSPITAL

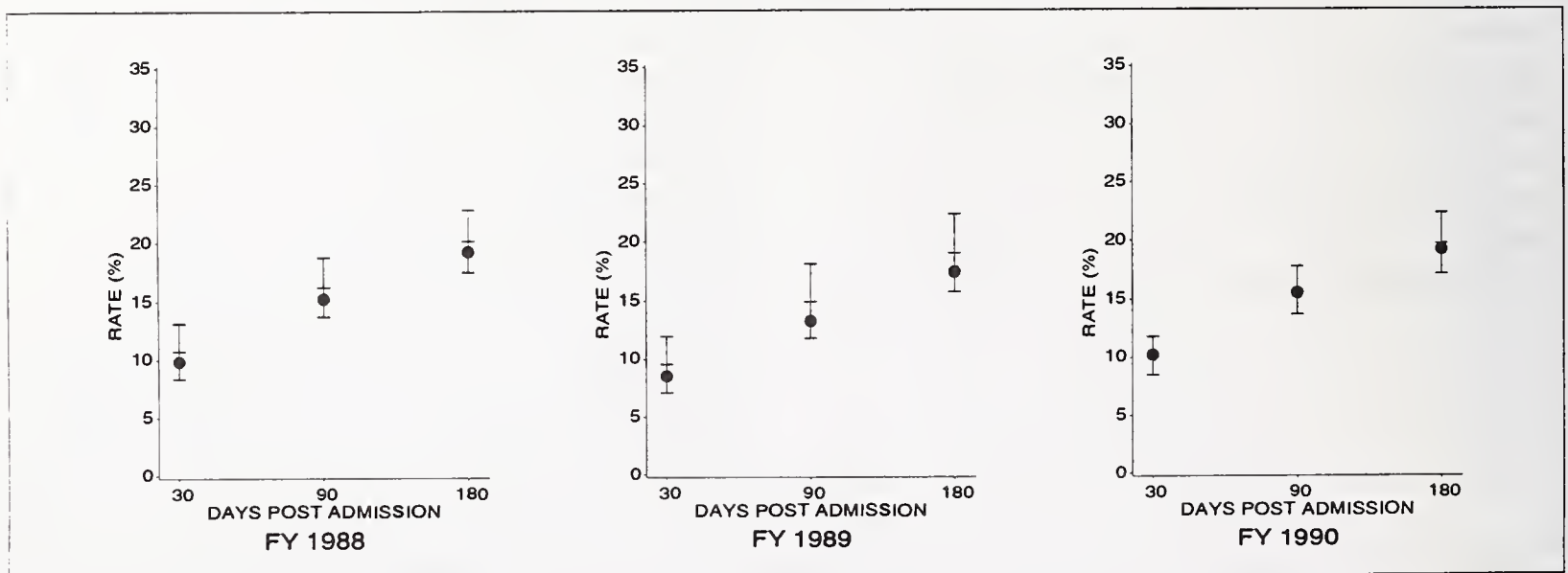
HOSPITAL RD  
MALDEN, MA 02148  
Medicare Provider Number: 220092

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1351            | 10.2                | 10.1 | 0.8   | 15.5    | 15.7 | 1.0   | 19.2     | 19.7 | 1.3   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 53              | 32.1                | 27.4 | 8.2   | 37.7    | 30.7 | 8.2   | 39.6     | 33.5 | 8.7   |
| Congestive Heart Failure.....              | 89              | 15.7                | 15.2 | 4.1   | 23.6    | 24.2 | 5.0   | 31.5     | 30.5 | 5.7   |
| Pneumonia/Influenza.....                   | 57              | 17.5                | 17.3 | 5.0   | 24.6    | 23.7 | 5.7   | 26.3     | 27.7 | 6.5   |
| Chronic Obstructive Pulmonary Disease..... | 10              | 20.0                | 9.4  | ----- | 20.0    | 16.4 | ----- | 20.0     | 21.3 | ----- |
| Transient Cerebral Ischemia.....           | 13              | 0.0                 | 2.2  | ----- | 15.4    | 4.8  | ----- | 15.4     | 7.4  | ----- |
| Stroke.....                                | 42              | 16.7                | 16.9 | ----- | 35.7    | 23.1 | ----- | 38.1     | 26.8 | ----- |
| Hip Fracture.....                          | 25              | 0.0                 | 5.2  | ----- | 0.0     | 9.4  | ----- | 4.0      | 12.3 | ----- |
| Sepsis.....                                | 15              | 13.3                | 15.5 | ----- | 26.7    | 22.2 | ----- | 33.3     | 26.1 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 7               | 0.0                 | 4.8  | ----- | 0.0     | 8.9  | ----- | 0.0      | 12.3 | ----- |
| Carotid Endarterectomy.....                | 4               | 0.0                 | 2.7  | ----- | 0.0     | 5.1  | ----- | 0.0      | 7.3  | ----- |
| Hip Replacement/Reconstruction.....        | 14              | 0.0                 | 3.0  | ----- | 0.0     | 5.6  | ----- | 0.0      | 7.5  | ----- |
| Open Reduction of Hip Fracture.....        | 15              | 0.0                 | 4.3  | ----- | 0.0     | 8.3  | ----- | 6.7      | 11.3 | ----- |
| Prostatectomy.....                         | 35              | 0.0                 | 1.2  | ----- | 0.0     | 2.9  | ----- | 0.0      | 5.0  | ----- |
| Cholecystectomy.....                       | 26              | 3.8                 | 2.3  | ----- | 3.8     | 4.2  | ----- | 3.8      | 5.6  | ----- |
| Hysterectomy.....                          | 10              | 0.0                 | 0.5  | ----- | 0.0     | 1.2  | ----- | 0.0      | 1.9  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



**THE MALDEN HOSPITAL**  
Medicare Provider Number: 220092

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 76.0 years  
Proportion female..... 59.7 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 32.6 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 13.8 %  
Admitted for emergency..... 72.1 %

**COMORBIDITIES:**

Cancer..... 9.9 %  
Chronic cardiovascular disease..... 41.2 %  
Chronic liver disease..... 1.5 %  
Chronic renal disease..... 2.2 %  
Chronic pulmonary disease..... 38.9 %  
Cerebrovascular degeneration..... 5.5 %  
Diabetes mellitus..... 8.8 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 85.1%  
State ..... 13.5%  
Outside State ..... 1.4%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 10.9 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 197  
Occupancy Rate ..... 69.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 34.1 %  
Case Mix Index (CMI) ..... 1.2002

**STAFFING:**

Total Number of Physicians..... 132  
Percent of Physicians Board  
Certified Specialists ..... 78.8 %  
Medical Residents/Interns ..... 15  
Registered Nurses..... 243  
Licensed Practical Nurses ..... 32

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# THE MEDICAL CTR CENTRAL MASS-HOLDEN

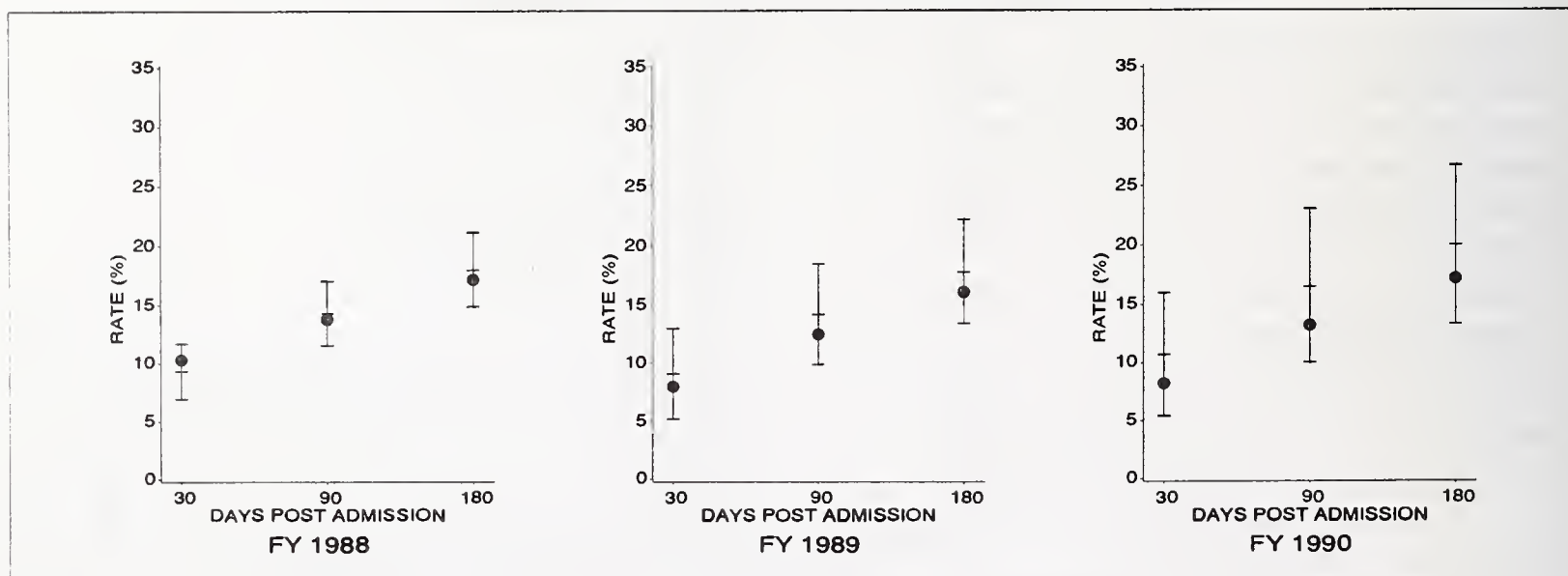
52 BOYDEN RD  
HOLDEN, MA 01520  
Medicare Provider Number: 220034

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 319                | 8.2                 | 10.7 | 2.7  | 13.2    | 16.5 | 3.3  | 17.2     | 20.0 | 3.3  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 12                 | 25.0                | 31.3 | ---- | 25.0    | 34.3 | ---- | 25.0     | 36.5 | ---- |
| Congestive Heart Failure.....              | 27                 | 3.7                 | 19.5 | ---- | 18.5    | 30.9 | ---- | 40.7     | 36.8 | ---- |
| Pneumonia/Influenza.....                   | 19                 | 31.6                | 22.7 | ---- | 42.1    | 31.7 | ---- | 42.1     | 36.2 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 5                  | 0.0                 | 5.2  | ---- | 0.0     | 9.8  | ---- | 0.0      | 13.1 | ---- |
| Transient Cerebral Ischemia.....           | 3                  | 0.0                 | 2.1  | ---- | 0.0     | 4.6  | ---- | 0.0      | 7.4  | ---- |
| Stroke.....                                | 9                  | 11.1                | 21.8 | ---- | 11.1    | 30.6 | ---- | 11.1     | 34.5 | ---- |
| Hip Fracture.....                          | 7                  | 14.3                | 8.1  | ---- | 28.6    | 14.2 | ---- | 42.9     | 18.0 | ---- |
| Sepsis.....                                | 1                  | 0.0                 | 16.2 | ---- | 0.0     | 20.5 | ---- | 0.0      | 23.2 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 4                  | 0.0                 | 2.1  | ---- | 0.0     | 3.8  | ---- | 0.0      | 5.4  | ---- |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 7                  | 14.3                | 3.2  | ---- | 14.3    | 5.3  | ---- | 14.3     | 6.6  | ---- |
| Open Reduction of Hip Fracture.....        | 2                  | 0.0                 | 7.7  | ---- | 50.0    | 13.5 | ---- | 50.0     | 16.6 | ---- |
| Prostatectomy.....                         | 8                  | 0.0                 | 0.4  | ---- | 0.0     | 0.9  | ---- | 0.0      | 1.5  | ---- |
| Cholecystectomy.....                       | 4                  | 0.0                 | 3.2  | ---- | 0.0     | 6.6  | ---- | 0.0      | 9.6  | ---- |
| Hysterectomy.....                          | 2                  | 0.0                 | 0.2  | ---- | 0.0     | 0.5  | ---- | 0.0      | 0.8  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# THE MEDICAL CTR CENTRAL MASS-HOLDEN

Medicare Provider Number: 220034

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.8 years  
Proportion female..... 59.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 38.2 %  
Transferred from skilled nursing facility..... 0.9 %  
Admitted for elective procedure..... 10.3 %  
Admitted for emergency..... 50.5 %

### COMORBIDITIES:

Cancer..... 6.9 %  
Chronic cardiovascular disease..... 40.4 %  
Chronic liver disease..... 0.9 %  
Chronic renal disease..... 2.2 %  
Chronic pulmonary disease..... 20.7 %  
Cerebrovascular degeneration..... 2.2 %  
Diabetes mellitus..... 5.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 95.6%  
State ..... 2.3%  
Outside State ..... 2.1%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.1 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1988

### PROFILE:

Total Beds ..... 65  
Ownership/Control..... Private, Non-Profit  
Case Mix Index (CMI) ..... 1.1939

### STAFFING:

Medical Residents/Interns ..... 4  
Registered Nurses..... 77  
Licensed Practical Nurses ..... 21

### SPECIALTY SERVICES:

Burn Unit ..... No  
Coronary Care Unit ..... Yes  
Hospice Care ..... No  
Intensive Care Unit ..... Yes  
Organ Transplant ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# THE MEDICAL CTR CENTRAL MASS-MEMORIAL

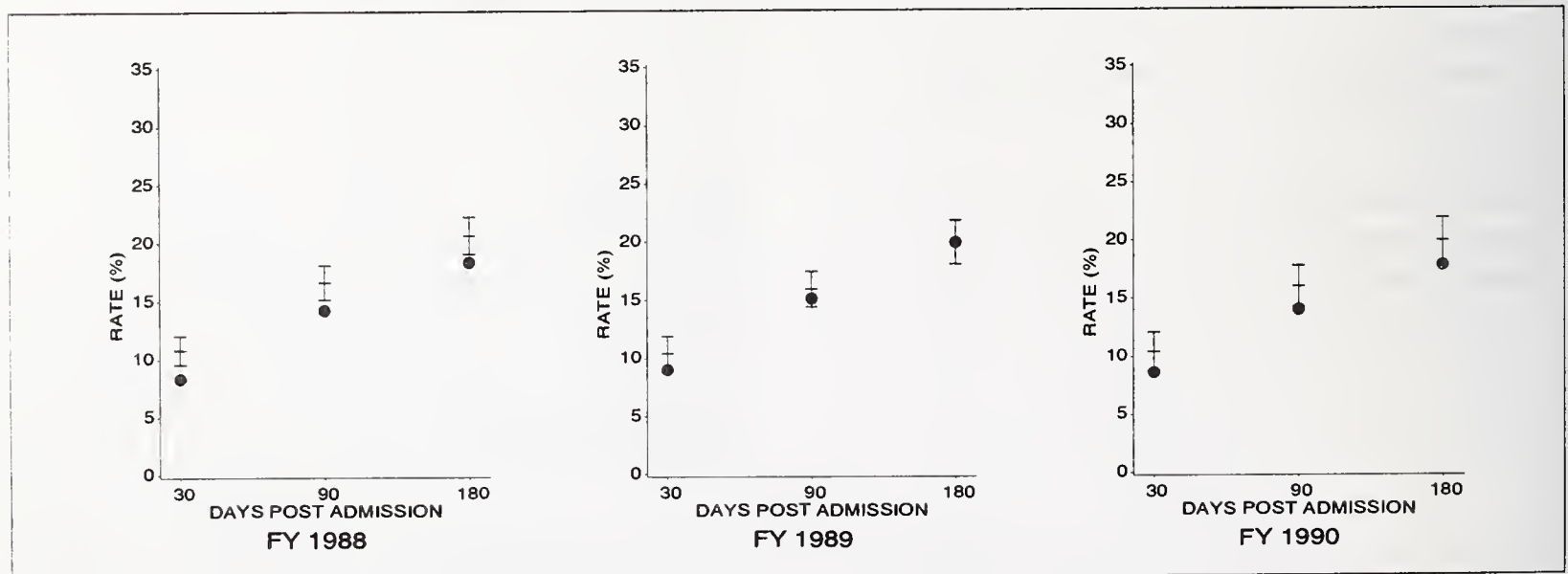
119 BELMONT ST  
WORCESTER, MA 01605  
Medicare Provider Number: 220026

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2924            | 8.6                 | 10.4 | 0.8   | 14.0    | 16.0 | 0.9   | 17.8     | 19.9 | 1.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 87              | 25.3                | 28.1 | 7.0   | 33.3    | 32.7 | 7.9   | 37.9     | 36.2 | 7.0   |
| Congestive Heart Failure.....              | 147             | 17.0                | 16.6 | 3.1   | 21.8    | 26.2 | 4.1   | 27.2     | 33.0 | 5.0   |
| Pneumonia/Influenza.....                   | 156             | 12.2                | 21.2 | 4.6   | 17.3    | 29.1 | 5.5   | 25.0     | 34.4 | 5.6   |
| Chronic Obstructive Pulmonary Disease..... | 34              | 8.8                 | 8.5  | ----- | 11.8    | 15.0 | ----- | 14.7     | 20.4 | ----- |
| Transient Cerebral Ischemia.....           | 26              | 0.0                 | 1.9  | ----- | 0.0     | 4.5  | ----- | 0.0      | 7.4  | ----- |
| Stroke.....                                | 86              | 17.4                | 21.0 | 6.7   | 24.4    | 27.8 | 6.8   | 27.9     | 31.8 | 7.8   |
| Hip Fracture.....                          | 88              | 1.1                 | 6.6  | 4.2   | 4.5     | 11.8 | 5.6   | 8.0      | 15.4 | 6.2   |
| Sepsis.....                                | 39              | 17.9                | 23.6 | ----- | 30.8    | 33.9 | ----- | 38.5     | 39.6 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 24              | 4.2                 | 2.5  | ----- | 4.2     | 5.1  | ----- | 4.2      | 7.7  | ----- |
| Carotid Endarterectomy.....                | 12              | 0.0                 | 1.1  | ----- | 0.0     | 2.0  | ----- | 0.0      | 2.8  | ----- |
| Hip Replacement/Reconstruction.....        | 62              | 1.6                 | 3.3  | 2.7   | 4.8     | 6.3  | 4.2   | 4.8      | 8.6  | 5.8   |
| Open Reduction of Hip Fracture.....        | 44              | 0.0                 | 6.7  | ----- | 4.5     | 12.3 | ----- | 9.1      | 16.3 | ----- |
| Prostatectomy.....                         | 89              | 0.0                 | 1.2  | 1.7   | 3.4     | 2.7  | 1.9   | 7.9      | 4.6  | 3.5   |
| Cholecystectomy.....                       | 39              | 0.0                 | 2.1  | ----- | 0.0     | 3.5  | ----- | 0.0      | 4.4  | ----- |
| Hysterectomy.....                          | 31              | 0.0                 | 0.5  | ----- | 3.2     | 1.1  | ----- | 3.2      | 1.7  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# THE MEDICAL CTR CENTRAL MASS-MEMORIAL

Medicare Provider Number: 220026

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.6 years  
Proportion female..... 58.1 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 34.0 %  
Transferred from skilled nursing facility..... 4.8 %  
Admitted for elective procedure..... 28.4 %  
Admitted for emergency..... 64.6 %

### COMORBIDITIES:

Cancer..... 9.7 %  
Chronic cardiovascular disease..... 30.7 %  
Chronic liver disease..... 1.3 %  
Chronic renal disease..... 3.7 %  
Chronic pulmonary disease..... 8.4 %  
Cerebrovascular degeneration..... 6.4 %  
Diabetes mellitus..... 8.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 92.4%  
State ..... 4.4%  
Outside State ..... 3.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.1 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1988

### PROFILE:

Total Beds ..... 344  
Ownership/Control..... Private, Non-Profit  
Case Mix Index (CMI) ..... 1.2256

### STAFFING:

Medical Residents/Interns ..... 30  
Registered Nurses ..... 352  
Licensed Practical Nurses ..... 46

### SPECIALTY SERVICES:

Burn Unit ..... No  
Coronary Care Unit ..... Yes  
Hospice Care ..... Yes  
Intensive Care Unit ..... Yes  
Organ Transplant ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation ..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# THE NASHOBA COMMUNITY HOSPITAL INC

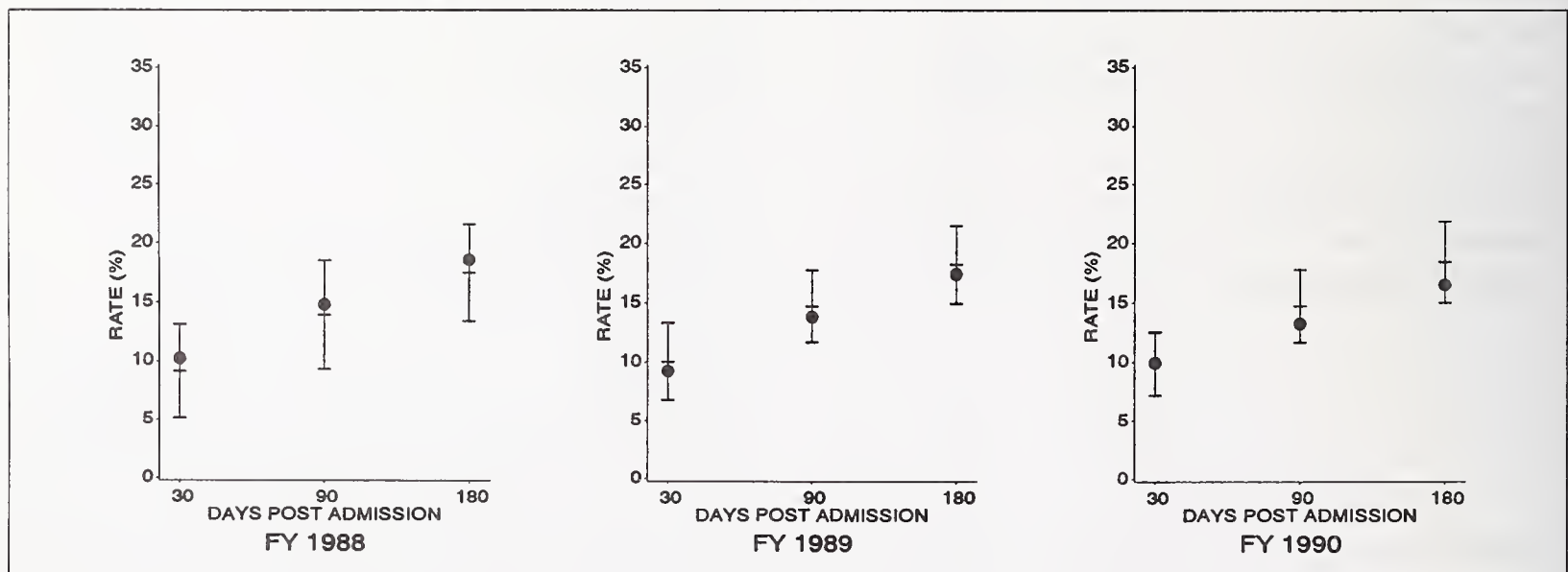
200 GROTON AVE  
AYER, MA 01432  
Medicare Provider Number: 220098

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 790             | 9.9                 | 9.8  | 1.4   | 13.2    | 14.7 | 1.5   | 16.5     | 18.4 | 1.7   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 47              | 29.8                | 26.1 | ----- | 31.9    | 29.8 | ----- | 34.0     | 32.9 | ----- |
| Congestive Heart Failure.....              | 38              | 10.5                | 14.6 | ----- | 15.8    | 22.8 | ----- | 23.7     | 28.6 | ----- |
| Pneumonia/Influenza.....                   | 37              | 13.5                | 18.1 | ----- | 18.9    | 25.5 | ----- | 32.4     | 30.1 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 17              | 5.9                 | 8.4  | ----- | 5.9     | 13.7 | ----- | 5.9      | 17.7 | ----- |
| Transient Cerebral ischemia.....           | 14              | 7.1                 | 2.9  | ----- | 7.1     | 6.3  | ----- | 7.1      | 9.8  | ----- |
| Stroke.....                                | 20              | 25.0                | 21.5 | ----- | 25.0    | 29.9 | ----- | 30.0     | 34.6 | ----- |
| Hip Fracture.....                          | 17              | 11.8                | 6.9  | ----- | 17.6    | 13.2 | ----- | 17.6     | 17.2 | ----- |
| Sepsis.....                                | 10              | 30.0                | 21.1 | ----- | 30.0    | 29.2 | ----- | 30.0     | 33.8 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 27              | 0.0                 | 2.8  | ----- | 0.0     | 5.0  | ----- | 3.7      | 7.2  | ----- |
| Carotid Endarterectomy.....                | 2               | 0.0                 | 0.9  | ----- | 0.0     | 1.6  | ----- | 0.0      | 2.3  | ----- |
| Hip Replacement/Reconstruction.....        | 11              | 9.1                 | 3.8  | ----- | 18.2    | 7.0  | ----- | 18.2     | 9.0  | ----- |
| Open Reduction of Hip Fracture.....        | 7               | 0.0                 | 8.3  | ----- | 0.0     | 16.9 | ----- | 0.0      | 22.5 | ----- |
| Prostatectomy.....                         | 22              | 0.0                 | 1.0  | ----- | 0.0     | 2.2  | ----- | 0.0      | 3.9  | ----- |
| Cholecystectomy.....                       | 13              | 7.7                 | 1.3  | ----- | 7.7     | 2.4  | ----- | 7.7      | 3.3  | ----- |
| Hysterectomy.....                          | 2               | 0.0                 | 0.1  | ----- | 0.0     | 0.2  | ----- | 0.0      | 0.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# THE NASHOBA COMMUNITY HOSPITAL INC

Medicare Provider Number: 220098

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.9 years  
Proportion female..... 61.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 31.1 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 18.2 %  
Admitted for emergency..... 66.6 %

### COMORBIDITIES:

Cancer..... 7.8 %  
Chronic cardiovascular disease..... 47.3 %  
Chronic liver disease..... 1.0 %  
Chronic renal disease..... 1.3 %  
Chronic pulmonary disease..... 18.0 %  
Cerebrovascular degeneration..... 6.5 %  
Diabetes mellitus..... 6.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 77.2%  
State ..... 18.8%  
Outside State ..... 4.0%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.3 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 58  
Occupancy Rate ..... 74.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 47.0 %  
Case Mix Index (CMI) ..... 1.1431

### STAFFING:

Total Number of Physicians..... 76  
Percent of Physicians Board  
Certified Specialists ..... 76.3 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 81  
Licensed Practical Nurses ..... 0

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# THE PROVIDENCE HOSPITAL INC

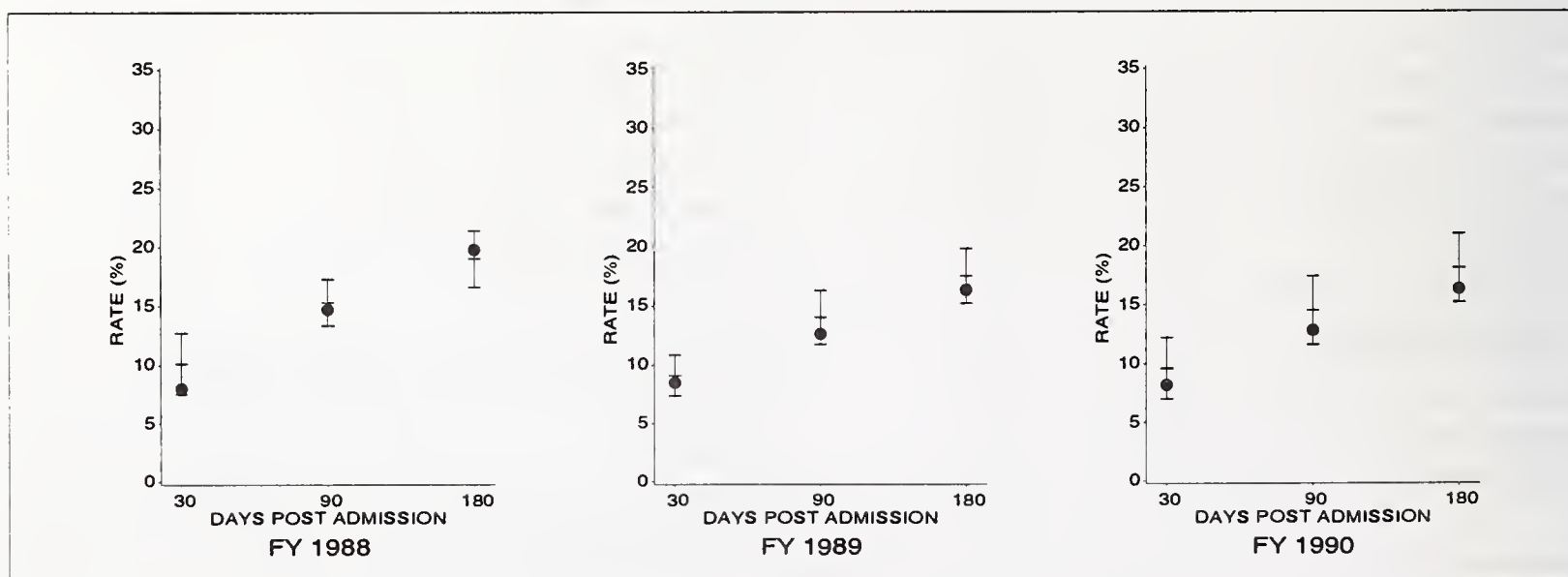
1233 MAIN ST  
HOLYOKE, MA 01040  
Medicare Provider Number: 220023

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1239               | 8.2                 | 9.6  | 1.3   | 12.8    | 14.5 | 1.5   | 16.3     | 18.1 | 1.5   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 30                 | 16.7                | 29.8 | ----- | 20.0    | 32.9 | ----- | 20.0     | 35.7 | ----- |
| Congestive Heart Failure.....              | 88                 | 18.2                | 16.3 | 4.9   | 23.9    | 25.3 | 5.1   | 28.4     | 31.8 | 6.1   |
| Pneumonia/Influenza.....                   | 101                | 7.9                 | 17.7 | 5.3   | 13.9    | 24.2 | 5.8   | 20.8     | 28.1 | 5.4   |
| Chronic Obstructive Pulmonary Disease..... | 16                 | 6.3                 | 6.9  | ----- | 18.8    | 12.3 | ----- | 18.8     | 16.6 | ----- |
| Transient Cerebral Ischemia.....           | 15                 | 0.0                 | 1.9  | ----- | 6.7     | 4.1  | ----- | 6.7      | 6.8  | ----- |
| Stroke.....                                | 49                 | 16.3                | 20.7 | ----- | 20.4    | 28.0 | ----- | 24.5     | 32.3 | ----- |
| Hip Fracture.....                          | 41                 | 9.8                 | 9.1  | ----- | 12.2    | 16.0 | ----- | 14.6     | 20.2 | ----- |
| Sepsis.....                                | 7                  | 28.6                | 17.1 | ----- | 42.9    | 22.2 | ----- | 42.9     | 24.9 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 4                  | 0.0                 | 4.0  | ----- | 0.0     | 8.7  | ----- | 0.0      | 12.7 | ----- |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 25                 | 0.0                 | 3.1  | ----- | 0.0     | 6.0  | ----- | 0.0      | 8.0  | ----- |
| Open Reduction of Hip Fracture.....        | 19                 | 10.5                | 9.5  | ----- | 15.8    | 17.3 | ----- | 21.1     | 22.1 | ----- |
| Prostatectomy.....                         | 25                 | 0.0                 | 1.1  | ----- | 0.0     | 2.6  | ----- | 4.0      | 4.2  | ----- |
| Cholecystectomy.....                       | 22                 | 9.1                 | 4.3  | ----- | 13.6    | 9.2  | ----- | 13.6     | 13.4 | ----- |
| Hysterectomy.....                          | 12                 | 0.0                 | 0.1  | ----- | 0.0     | 0.4  | ----- | 0.0      | 0.7  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# THE PROVIDENCE HOSPITAL INC

Medicare Provider Number: 220023

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.3 years  
Proportion female..... 63.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 35.6 %  
Transferred from skilled nursing facility..... 0.4 %  
Admitted for elective procedure..... 14.3 %  
Admitted for emergency..... 67.3 %

### COMORBIDITIES:

Cancer..... 6.9 %  
Chronic cardiovascular disease..... 49.2 %  
Chronic liver disease..... 0.4 %  
Chronic renal disease..... 2.3 %  
Chronic pulmonary disease..... 18.5 %  
Cerebrovascular degeneration..... 4.2 %  
Diabetes mellitus..... 6.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 81.4%  
State ..... 16.2%  
Outside State ..... 2.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.8 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 172  
Occupancy Rate ..... 68.0 %  
Ownership/Control..... Church  
Medicare Discharges ..... 26.7 %  
Case Mix Index (CMI) ..... 1.2129

### STAFFING:

Total Number of Physicians..... 235  
Percent of Physicians Board  
Certified Specialists ..... 78.3 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 151  
Licensed Practical Nurses ..... 26

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# THE REHAB HOSPITAL WEST

14 CHESTNUT PLACE  
LUDLOW, MA 01056  
Medicare Provider Number: 220175

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 21                 | 0.0                 | 11.6 | ---- | 0.0     | 17.7 | ---- | 9.5      | 22.3 | ---- |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Congestive Heart Failure.....              | 0                  |                     |      |      |         |      |      |          |      |      |
| Pneumonia/Influenza.....                   | 1                  | 0.0                 | 17.9 | ---- | 0.0     | 24.8 | ---- | 0.0      | 32.1 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |      |         |      |      |          |      |      |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Stroke.....                                | 10                 | 0.0                 | 18.6 | ---- | 0.0     | 27.5 | ---- | 10.0     | 33.4 | ---- |
| Hip Fracture.....                          | 1                  | 0.0                 | 10.0 | ---- | 0.0     | 16.1 | ---- | 0.0      | 21.5 | ---- |
| Sepsis.....                                | 0                  |                     |      |      |         |      |      |          |      |      |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 0                  |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 0                  |                     |      |      |         |      |      |          |      |      |
| Hysterectomy.....                          | 0                  |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES

No Graphs are presented when the standard deviation  
was not computed for one or more of the three fiscal years,  
(1988, 1989, or 1990)

# THE REHAB HOSPITAL WEST

Medicare Provider Number: 220175

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.8 years  
Proportion female..... 61.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 0.0 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 81.0 %  
Admitted for emergency..... 0.0 %

### COMORBIDITIES:

Cancer..... 4.8 %  
Chronic cardiovascular disease..... 38.1 %  
Chronic liver disease..... 0.0 %  
Chronic renal disease..... 4.8 %  
Chronic pulmonary disease..... 9.5 %  
Cerebrovascular degeneration..... 0.0 %  
Diabetes mellitus..... 0.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 65.9%  
State ..... 29.8%  
Outside State ..... 4.3%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 33.2 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 544  
Ownership/Control..... Private, For Profit  
Case Mix Index (CMI) ..... 0.9517

### STAFFING:

Medical Residents/Interns ..... 48  
Registered Nurses..... 685  
Licensed Practical Nurses ..... 66

### SPECIALTY SERVICES:

Burn Unit ..... No  
Coronary Care Unit ..... Yes  
Hospice Care ..... No  
Intensive Care Unit ..... Yes  
Organ Transplant ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# THE SYMMES HOSPITAL

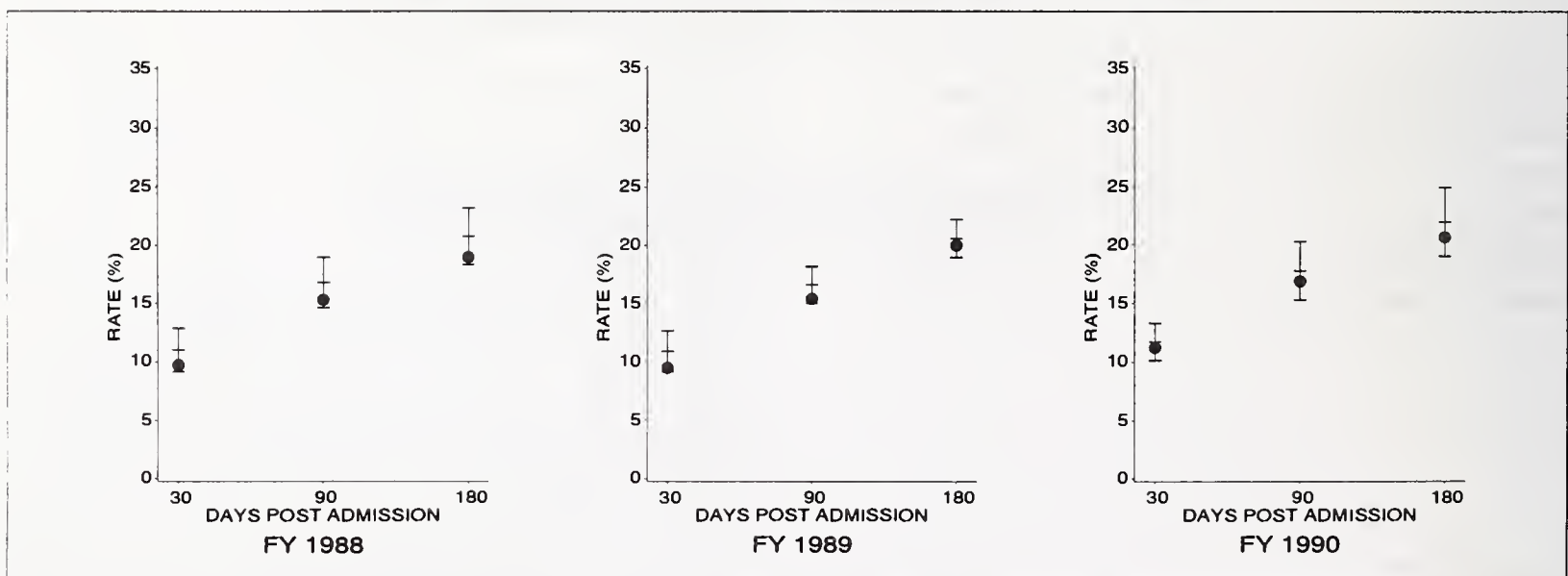
HOSPITAL ROAD  
ARLINGTON, MA 02174  
Medicare Provider Number: 220053

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2146            | 11.2                | 11.7 | 0.8   | 16.9    | 17.8 | 1.3   | 20.7     | 22.0 | 1.5   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 96              | 28.1                | 29.6 | 5.2   | 34.4    | 34.0 | 7.2   | 36.5     | 37.3 | 7.3   |
| Congestive Heart Failure.....              | 102             | 9.8                 | 16.5 | 5.7   | 21.6    | 25.9 | 9.2   | 23.5     | 32.5 | 7.6   |
| Pneumonia/Influenza.....                   | 122             | 20.5                | 19.1 | 3.9   | 24.6    | 26.7 | 5.2   | 33.6     | 31.3 | 4.5   |
| Chronic Obstructive Pulmonary Disease..... | 4               | 50.0                | 14.5 | ----- | 50.0    | 23.3 | ----- | 75.0     | 29.2 | ----- |
| Transient Cerebral Ischemia.....           | 26              | 3.8                 | 2.1  | ----- | 7.7     | 4.7  | ----- | 15.4     | 7.9  | ----- |
| Stroke.....                                | 91              | 20.9                | 20.4 | 4.4   | 26.4    | 28.7 | 5.2   | 26.4     | 33.4 | 7.7   |
| Hip Fracture.....                          | 79              | 7.6                 | 7.7  | 3.3   | 16.5    | 13.7 | 5.0   | 20.3     | 17.7 | 5.2   |
| Sepsis.....                                | 31              | 12.9                | 23.5 | ----- | 29.0    | 33.1 | ----- | 32.3     | 38.7 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 7               | 0.0                 | 3.2  | ----- | 0.0     | 6.0  | ----- | 0.0      | 8.6  | ----- |
| Carotid Endarterectomy.....                | 5               | 20.0                | 2.8  | ----- | 20.0    | 5.0  | ----- | 20.0     | 6.7  | ----- |
| Hip Replacement/Reconstruction.....        | 34              | 2.9                 | 4.3  | ----- | 8.8     | 8.0  | ----- | 14.7     | 10.7 | ----- |
| Open Reduction of Hip Fracture.....        | 47              | 8.5                 | 7.1  | ----- | 17.0    | 12.8 | ----- | 19.1     | 16.7 | ----- |
| Prostatectomy.....                         | 61              | 3.3                 | 1.3  | 2.2   | 6.6     | 3.1  | 3.6   | 9.8      | 5.1  | 4.9   |
| Cholecystectomy.....                       | 31              | 6.5                 | 3.3  | ----- | 9.7     | 6.6  | ----- | 9.7      | 9.0  | ----- |
| Hysterectomy.....                          | 10              | 0.0                 | 0.1  | ----- | 0.0     | 0.3  | ----- | 0.0      | 0.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# THE SYMMES HOSPITAL

Medicare Provider Number: 220053

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 79.3 years  
Proportion female..... 65.3 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 24.5 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 12.7 %  
Admitted for emergency..... 83.5 %

### COMORBIDITIES:

Cancer..... 8.1 %  
Chronic cardiovascular disease..... 37.8 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 2.5 %  
Chronic pulmonary disease..... 13.3 %  
Cerebrovascular degeneration..... 12.3 %  
Diabetes mellitus..... 6.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 88.3%  
State ..... 9.5%  
Outside State ..... 2.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.7 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 112  
Occupancy Rate ..... 81.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 65.5 %  
Case Mix Index (CMI) ..... 1.2249

### STAFFING:

Total Number of Physicians..... 94  
Percent of Physicians Board  
Certified Specialists..... 89.4 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 45  
Licensed Practical Nurses ..... 3

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# TOBEY HOSPITAL INC

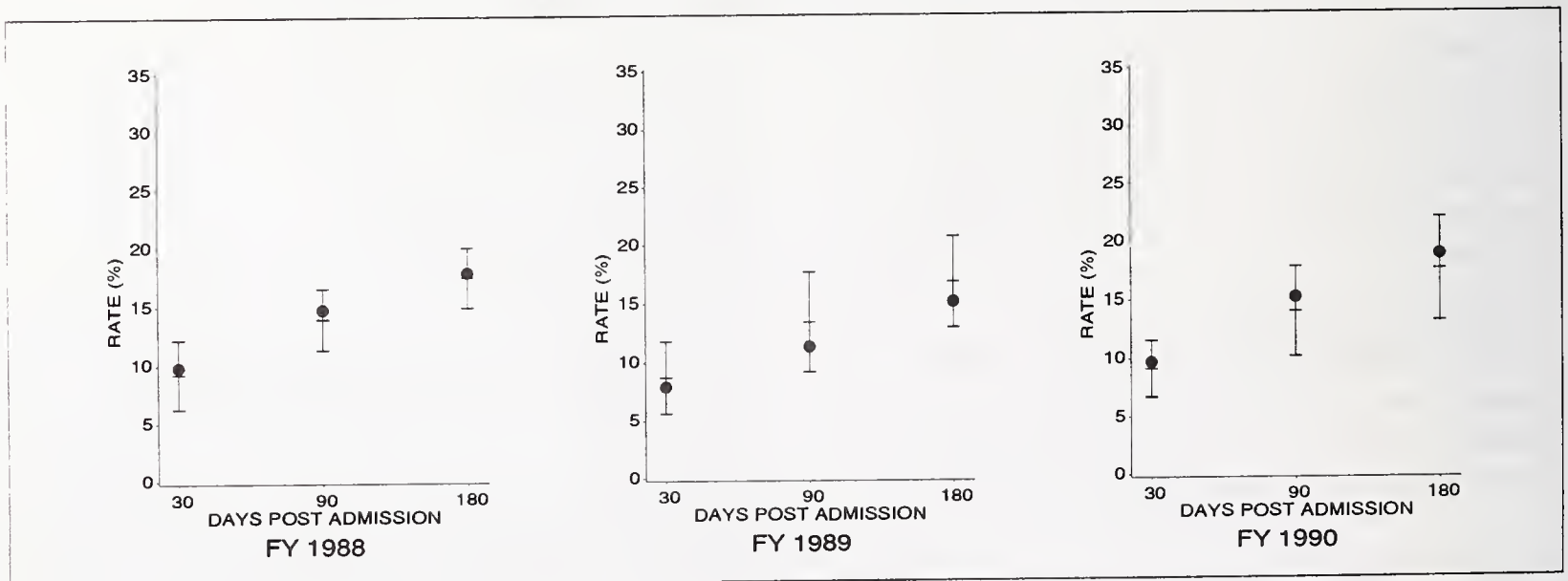
43 HIGH ST  
WAREHAM, MA 02571  
Medicare Provider Number: 220074

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 945             | 9.7                 | 9.1  | 1.2   | 15.2    | 14.0 | 1.9   | 18.9     | 17.6 | 2.2   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 37              | 29.7                | 30.6 | ----- | 29.7    | 33.2 | ----- | 37.8     | 35.7 | ----- |
| Congestive Heart Failure.....              | 56              | 12.5                | 14.6 | 5.1   | 21.4    | 23.4 | 7.2   | 26.8     | 30.0 | 7.3   |
| Pneumonia/Influenza.....                   | 44              | 20.5                | 14.4 | ----- | 29.5    | 20.1 | ----- | 31.8     | 23.5 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 16              | 25.0                | 12.1 | ----- | 25.0    | 20.5 | ----- | 31.3     | 26.5 | ----- |
| Transient Cerebral Ischemia.....           | 18              | 0.0                 | 1.5  | ----- | 0.0     | 3.5  | ----- | 5.6      | 5.9  | ----- |
| Stroke.....                                | 47              | 17.0                | 16.7 | ----- | 27.7    | 23.1 | ----- | 36.2     | 26.7 | ----- |
| Hip Fracture.....                          | 31              | 12.9                | 6.2  | ----- | 16.1    | 11.0 | ----- | 22.6     | 14.4 | ----- |
| Sepsis.....                                | 5               | 40.0                | 24.5 | ----- | 40.0    | 32.4 | ----- | 40.0     | 37.0 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 21              | 9.5                 | 4.3  | ----- | 9.5     | 7.7  | ----- | 9.5      | 10.2 | ----- |
| Open Reduction of Hip Fracture.....        | 11              | 0.0                 | 5.1  | ----- | 0.0     | 9.5  | ----- | 18.2     | 12.9 | ----- |
| Prostatectomy.....                         | 38              | 0.0                 | 0.8  | ----- | 0.0     | 1.8  | ----- | 5.3      | 3.1  | ----- |
| Cholecystectomy.....                       | 12              | 8.3                 | 2.6  | ----- | 8.3     | 4.8  | ----- | 8.3      | 6.7  | ----- |
| Hysterectomy.....                          | 4               | 0.0                 | 0.1  | ----- | 0.0     | 0.3  | ----- | 0.0      | 0.6  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





**TOBEY HOSPITAL INC**  
Medicare Provider Number: 220074

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 76.4 years  
Proportion female..... 57.4 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 26.8 %  
Transferred from skilled nursing facility..... 0.2 %  
Admitted for elective procedure..... 9.0 %  
Admitted for emergency..... 20.3 %

**COMORBIDITIES:**

Cancer..... 6.8 %  
Chronic cardiovascular disease..... 35.1 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 1.7 %  
Chronic pulmonary disease..... 13.0 %  
Cerebrovascular degeneration..... 4.7 %  
Diabetes mellitus..... 10.0 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 68.8%  
State ..... 27.6%  
Outside State ..... 3.6%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 9.4 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 89  
Occupancy Rate ..... 65.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 45.4 %  
Case Mix Index (CMI) ..... 1.0877

**STAFFING:**

Total Number of Physicians..... 41  
Percent of Physicians Board  
Certified Specialists..... 58.5 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 63  
Licensed Practical Nurses ..... 20

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# UNIVERSITY HOSPITAL

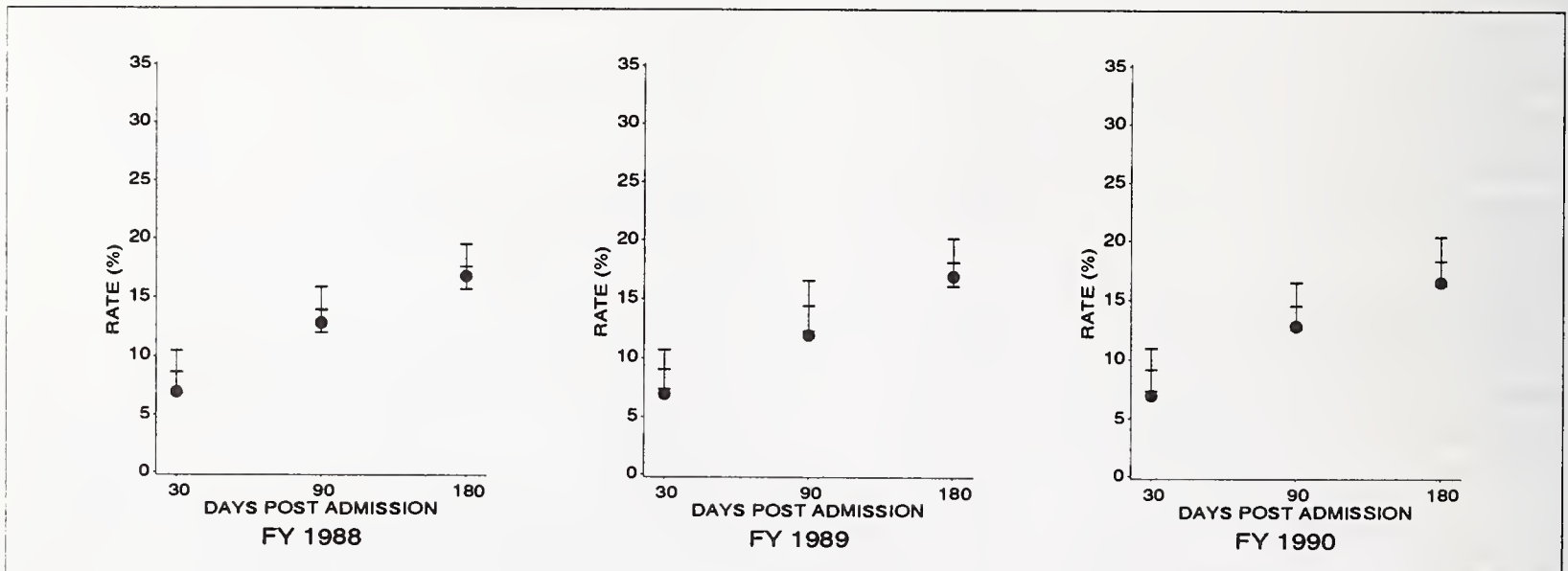
75 E NEWTON ST  
BOSTON, MA 02118  
Medicare Provider Number: 220031

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2144               | 6.9                 | 9.1  | 0.9   | 12.8    | 14.5 | 1.0   | 16.5     | 18.3 | 1.0   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 55                 | 12.7                | 23.3 | 8.3   | 16.4    | 26.9 | 9.1   | 16.4     | 29.8 | 10.0  |
| Congestive Heart Failure.....              | 79                 | 7.6                 | 15.3 | 5.9   | 13.9    | 24.7 | 6.5   | 22.8     | 31.2 | 6.1   |
| Pneumonia/Influenza.....                   | 38                 | 5.3                 | 14.4 | ----- | 15.8    | 20.5 | ----- | 31.6     | 24.3 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 16                 | 12.5                | 10.1 | ----- | 25.0    | 18.2 | ----- | 31.3     | 23.7 | ----- |
| Transient Cerebral Ischemia.....           | 15                 | 6.7                 | 1.3  | ----- | 6.7     | 2.8  | ----- | 6.7      | 4.2  | ----- |
| Stroke.....                                | 36                 | 16.7                | 22.2 | ----- | 25.0    | 29.3 | ----- | 25.0     | 33.2 | ----- |
| Hip Fracture.....                          | 24                 | 12.5                | 9.0  | ----- | 20.8    | 16.0 | ----- | 25.0     | 20.1 | ----- |
| Sepsis.....                                | 12                 | 33.3                | 34.4 | ----- | 41.7    | 45.6 | ----- | 50.0     | 51.0 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 71                 | 1.4                 | 3.3  | 3.0   | 2.8     | 4.6  | 4.2   | 2.8      | 5.8  | 4.9   |
| Coronary Artery Bypass Graft.....          | 143                | 7.7                 | 7.5  | 2.8   | 9.8     | 11.6 | 3.7   | 10.5     | 13.6 | 4.0   |
| Initial Pacemaker Insertion.....           | 6                  | 0.0                 | 2.8  | ----- | 16.7    | 5.6  | ----- | 16.7     | 7.8  | ----- |
| Carotid Endarterectomy.....                | 5                  | 0.0                 | 1.2  | ----- | 0.0     | 2.3  | ----- | 0.0      | 3.4  | ----- |
| Hip Replacement/Reconstruction.....        | 17                 | 17.6                | 5.9  | ----- | 17.6    | 11.4 | ----- | 29.4     | 15.4 | ----- |
| Open Reduction of Hip Fracture.....        | 11                 | 0.0                 | 8.5  | ----- | 18.2    | 14.9 | ----- | 27.3     | 18.6 | ----- |
| Prostatectomy.....                         | 34                 | 2.9                 | 0.9  | ----- | 5.9     | 1.8  | ----- | 5.9      | 2.9  | ----- |
| Cholecystectomy.....                       | 17                 | 11.8                | 7.3  | ----- | 11.8    | 12.1 | ----- | 11.8     | 14.7 | ----- |
| Hysterectomy.....                          | 9                  | 0.0                 | 0.7  | ----- | 0.0     | 1.5  | ----- | 0.0      | 2.3  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# UNIVERSITY HOSPITAL

Medicare Provider Number: 220031

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 70.5 years  
Proportion female..... 51.1 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 20.0 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 30.3 %  
Admitted for emergency..... 59.2 %

### COMORBIDITIES:

Cancer..... 9.0 %  
Chronic cardiovascular disease..... 39.0 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 6.5 %  
Chronic pulmonary disease..... 10.6 %  
Cerebrovascular degeneration..... 4.7 %  
Diabetes mellitus..... 8.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 43.5%  
State ..... 49.1%  
Outside State ..... 7.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.6 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 379  
Occupancy Rate ..... 67.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 39.2 %  
Case Mix Index (CMI) ..... 1.6844

### STAFFING:

Total Number of Physicians..... 423  
Percent of Physicians Board  
Certified Specialists .....(Not Available)  
Medical Residents/Interns ..... 209  
Registered Nurses..... 379  
Licensed Practical Nurses ..... 7

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... No  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# UNIVERSITY OF MASS MEDICAL CENTER

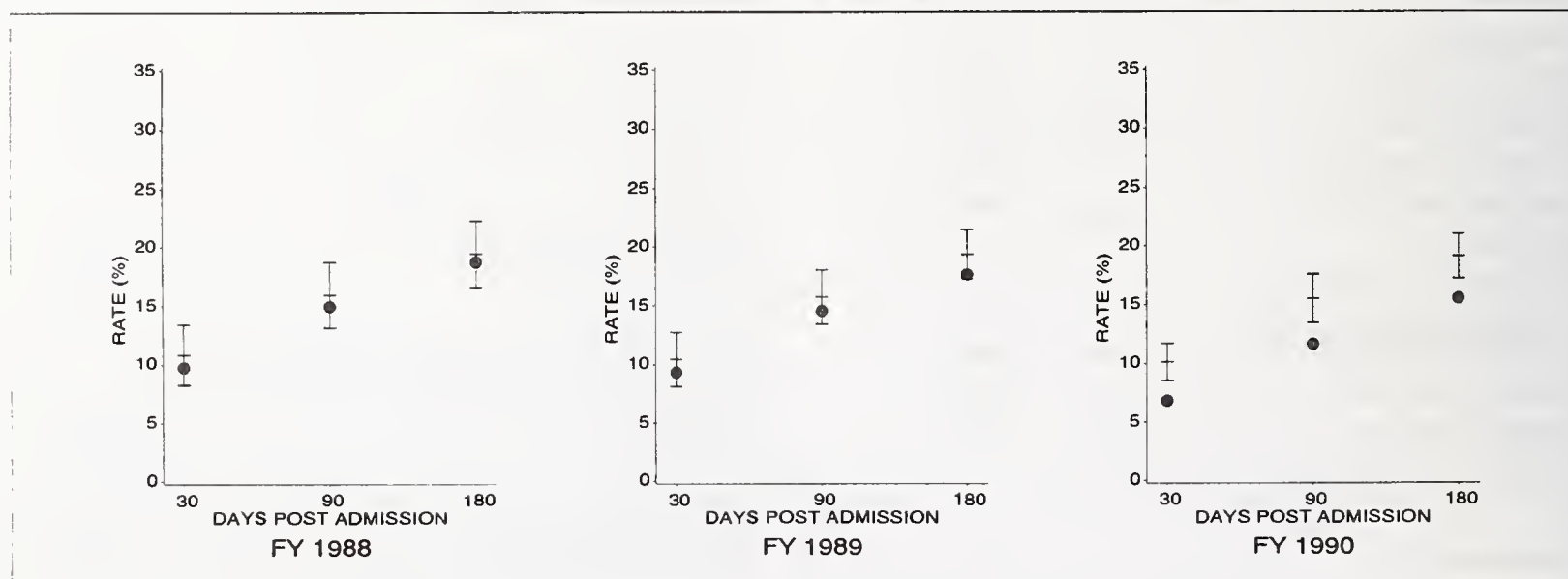
55 LAKE AVE N  
WORCESTER, MA 01605  
Medicare Provider Number: 220163

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1938            | 6.8                 | 10.1 | 0.8   | 11.6    | 15.5 | 1.0   | 15.5     | 19.1 | 1.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 58              | 19.0                | 24.4 | 6.9   | 24.1    | 27.3 | 6.3   | 24.1     | 29.9 | 7.0   |
| Congestive Heart Failure.....              | 66              | 7.6                 | 16.1 | 6.9   | 13.6    | 25.1 | 8.4   | 21.2     | 31.6 | 8.6   |
| Pneumonia/Influenza.....                   | 45              | 11.1                | 16.6 | ----- | 17.8    | 23.0 | ----- | 20.0     | 27.1 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 11              | 0.0                 | 9.5  | ----- | 0.0     | 16.0 | ----- | 0.0      | 20.5 | ----- |
| Transient Cerebral Ischemia.....           | 18              | 5.6                 | 1.9  | ----- | 5.6     | 4.1  | ----- | 5.6      | 6.5  | ----- |
| Stroke.....                                | 50              | 8.0                 | 22.0 | ----- | 16.0    | 28.2 | ----- | 20.0     | 31.7 | ----- |
| Hip Fracture.....                          | 26              | 0.0                 | 5.8  | ----- | 7.7     | 10.3 | ----- | 11.5     | 13.3 | ----- |
| Sepsis.....                                | 16              | 18.8                | 21.1 | ----- | 31.3    | 27.4 | ----- | 37.5     | 31.0 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 37              | 5.4                 | 3.0  | ----- | 5.4     | 4.2  | ----- | 5.4      | 5.4  | ----- |
| Coronary Artery Bypass Graft.....          | 119             | 10.9                | 7.0  | 4.5   | 12.6    | 10.6 | 3.7   | 14.3     | 12.2 | 3.6   |
| Initial Pacemaker Insertion.....           | 15              | 0.0                 | 3.3  | ----- | 0.0     | 6.1  | ----- | 13.3     | 8.5  | ----- |
| Carotid Endarterectomy.....                | 19              | 0.0                 | 1.6  | ----- | 0.0     | 2.9  | ----- | 0.0      | 4.2  | ----- |
| Hip Replacement/Reconstruction.....        | 35              | 0.0                 | 2.6  | ----- | 5.7     | 4.9  | ----- | 5.7      | 6.7  | ----- |
| Open Reduction of Hip Fracture.....        | 11              | 0.0                 | 4.7  | ----- | 0.0     | 8.6  | ----- | 9.1      | 11.3 | ----- |
| Prostatectomy.....                         | 33              | 3.0                 | 0.8  | ----- | 3.0     | 1.9  | ----- | 6.1      | 3.3  | ----- |
| Cholecystectomy.....                       | 23              | 0.0                 | 4.3  | ----- | 4.3     | 8.3  | ----- | 13.0     | 11.4 | ----- |
| Hysterectomy.....                          | 40              | 0.0                 | 2.4  | ----- | 2.5     | 5.2  | ----- | 7.5      | 7.6  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# UNIVERSITY OF MASS MEDICAL CENTER

Medicare Provider Number: 220163

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 70.8 years  
Proportion female..... 50.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 12.4 %  
Transferred from skilled nursing facility..... 4.1 %  
Admitted for elective procedure..... 24.5 %  
Admitted for emergency..... 58.3 %

### COMORBIDITIES:

Cancer..... 10.1 %  
Chronic cardiovascular disease..... 41.7 %  
Chronic liver disease..... 1.3 %  
Chronic renal disease..... 4.5 %  
Chronic pulmonary disease..... 13.1 %  
Cerebrovascular degeneration..... 5.8 %  
Diabetes mellitus..... 8.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 71.9%  
State..... 17.3%  
Outside State..... 10.8%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 11.3 Days  
State..... 10.1 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 371  
Occupancy Rate..... 83.0 %  
Ownership/Control..... State Government  
Medicare Discharges..... 26.5 %  
Case Mix Index (CMI)..... 1.9398

### STAFFING:

Total Number of Physicians..... 647  
Percent of Physicians Board  
Certified Specialists..... 88.7 %  
Medical Residents/Interns..... 231  
Registered Nurses..... 553  
Licensed Practical Nurses..... 50

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... No  
Comprehensive Geriatric..... Yes  
Hospice Care..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... Yes  
Other Intensive Care..... No  
Trauma Center..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... Yes  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# US ARMY HOSPITAL

FORT DEVANS, MA 01433  
Medicare Provider Number: 22008F

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2                  | 0.0                 | 27.6 | ----- | 0.0     | 35.4 | ----- | 0.0      | 38.8 | ----- |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Congestive Heart Failure.....              | 0                  |                     |      |       |         |      |       |          |      |       |
| Pneumonia/Influenza.....                   | 0                  |                     |      |       |         |      |       |          |      |       |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |       |         |      |       |          |      |       |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Stroke.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Fracture.....                          | 0                  |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0                  |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 0                  |                     |      |       |         |      |       |          |      |       |
| Hysterectomy.....                          | 0                  |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES

No Graphs are presented when the standard deviation  
was not computed for one or more of the three fiscal years,  
(1988, 1989, or 1990)



**US ARMY HOSPITAL**  
Medicare Provider Number: 22008F

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

|                                                |            |                                     |       |
|------------------------------------------------|------------|-------------------------------------|-------|
| <b>DEMOGRAPHICS:</b>                           |            | <b>COMORBIDITIES:</b>               |       |
| Average age at admission.....                  | 70.0 years | Cancer.....                         | 0.0 % |
| Proportion female.....                         | 50.0 %     | Chronic cardiovascular disease..... | 0.0 % |
| <b>ADMISSION SOURCES/TYPES:</b>                |            | Chronic liver disease.....          | 0.0 % |
| Referred by personal or HMO physician.....     | 0.0 %      | Chronic renal disease.....          | 0.0 % |
| Transferred from skilled nursing facility..... | 0.0 %      | Chronic pulmonary disease.....      | 0.0 % |
| Admitted for elective procedure.....           | 0.0 %      | Cerebrovascular degeneration.....   | 0.0 % |
| Admitted for emergency.....                    | 0.0 %      | Diabetes mellitus.....              | 0.0 % |

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

|                                              |        |                                         |           |
|----------------------------------------------|--------|-----------------------------------------|-----------|
| <b>ORIGIN OF MEDICARE PATIENT ADMISSION:</b> |        | <b>MEDICARE AVERAGE LENGTH OF STAY:</b> |           |
| County/City .....                            | 0.0%   | Hospital .....                          | 2.0 Days  |
| State .....                                  | 0.0%   | State .....                             | 10.1 Days |
| Outside State .....                          | 100.0% | National .....                          | 8.6 Days  |
| Total .....                                  | 100.0% |                                         |           |

**HOSPITAL CHARACTERISTICS\***

|                                                                                     |                 |                                                 |     |
|-------------------------------------------------------------------------------------|-----------------|-------------------------------------------------|-----|
| <b>SOURCE:</b> Health Care Financing Administration (OSCAR)** - Survey Year Unknown |                 |                                                 |     |
| <b>PROFILE:</b>                                                                     |                 | <b>SPECIALTY SERVICES:</b>                      |     |
| Total Beds .....                                                                    | 150             | Burn Unit .....                                 | Yes |
| Ownership/Control.....                                                              | (Not Available) | Coronary Care Unit .....                        | Yes |
| Case Mix Index (CMI) .....                                                          | 0.0000          | Hospice Care .....                              | Yes |
| <b>STAFFING:</b>                                                                    |                 | Intensive Care Unit .....                       | Yes |
| Medical Residents/Interns .....                                                     | 0               | Organ Transplant .....                          | Yes |
| Registered Nurses.....                                                              | 0               | Trauma Center .....                             | Yes |
| Licensed Practical Nurses .....                                                     | 0               | <b>OTHER SPECIALTY/HOSPITAL-BASED SERVICES:</b> |     |
|                                                                                     |                 | Alcohol/Drug .....                              | Yes |
|                                                                                     |                 | Rehabilitation.....                             | Yes |
|                                                                                     |                 | Psychiatric .....                               | Yes |
|                                                                                     |                 | Medicare Swing Beds .....                       | N/A |

\*\* Except for CMI

\* Not used in calculating mortality rates

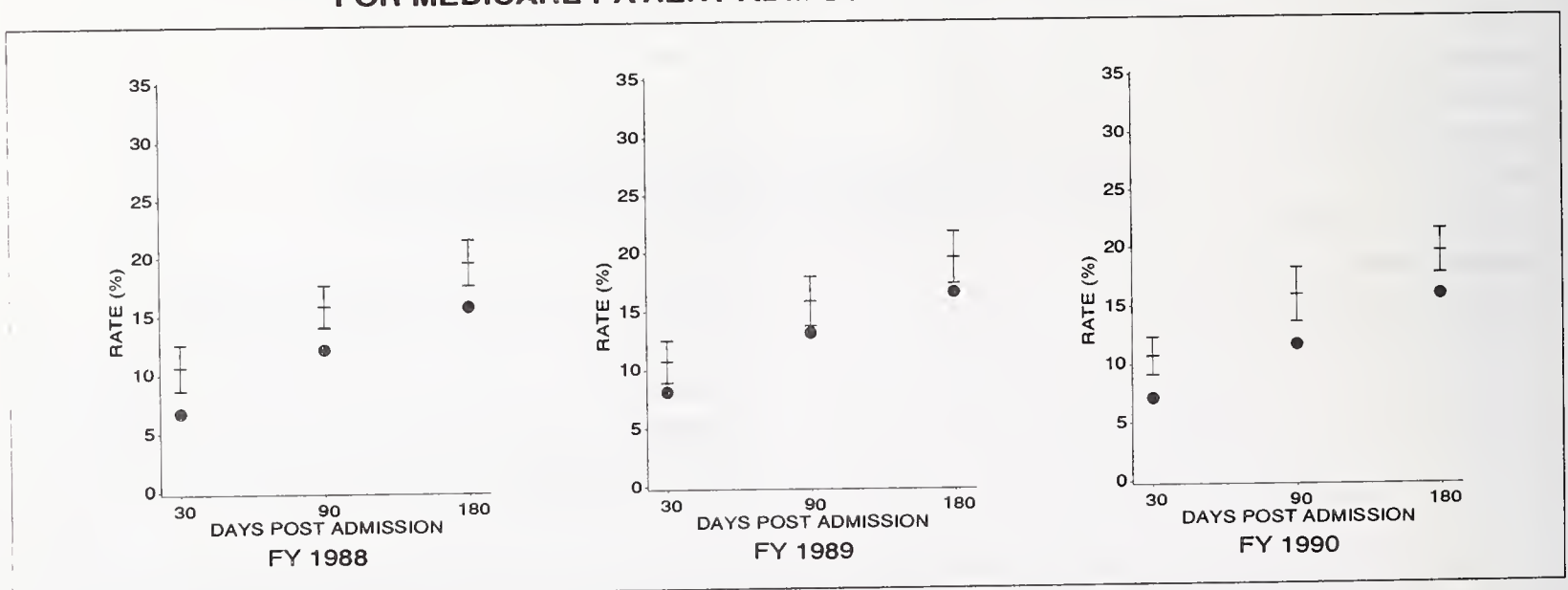
**WALTHAM HOSPITAL**  
HOPE AVE  
WALTHAM, MA 02154  
Medicare Provider Number: 220076

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1866            | 7.1                 | 10.7 | 0.8   | 11.6    | 15.9 | 1.2   | 15.9     | 19.6 | 1.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 54              | 31.5                | 32.9 | 7.4   | 33.3    | 36.1 | 7.5   | 33.3     | 38.9 | 8.3   |
| Congestive Heart Failure.....              | 125             | 8.0                 | 15.6 | 4.4   | 13.6    | 24.3 | 5.6   | 22.4     | 30.7 | 5.6   |
| Pneumonia/Influenza.....                   | 145             | 12.4                | 19.0 | 4.4   | 16.6    | 26.1 | 5.3   | 24.1     | 30.6 | 6.2   |
| Chronic Obstructive Pulmonary Disease..... | 32              | 6.3                 | 8.9  | ----- | 9.4     | 15.1 | ----- | 12.5     | 20.0 | ----- |
| Transient Cerebral Ischemia.....           | 24              | 0.0                 | 1.3  | ----- | 4.2     | 2.9  | ----- | 4.2      | 4.8  | ----- |
| Stroke.....                                | 59              | 13.6                | 22.5 | 7.4   | 18.6    | 30.4 | 7.9   | 27.1     | 34.4 | 6.9   |
| Hip Fracture.....                          | 56              | 1.8                 | 8.3  | 6.6   | 1.8     | 14.5 | 11.0  | 3.6      | 18.4 | 11.1  |
| Sepsis.....                                | 9               | 22.2                | 25.1 | ----- | 33.3    | 33.7 | ----- | 33.3     | 38.9 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 22              | 4.5                 | 4.2  | ----- | 4.5     | 7.8  | ----- | 4.5      | 10.9 | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 29              | 3.4                 | 6.1  | ----- | 3.4     | 11.0 | ----- | 3.4      | 14.3 | ----- |
| Open Reduction of Hip Fracture.....        | 33              | 0.0                 | 7.5  | ----- | 0.0     | 13.5 | ----- | 3.0      | 17.5 | ----- |
| Prostatectomy.....                         | 65              | 0.0                 | 0.9  | 1.4   | 0.0     | 2.1  | 2.5   | 1.5      | 3.6  | 2.9   |
| Cholecystectomy.....                       | 23              | 0.0                 | 1.7  | ----- | 0.0     | 3.1  | ----- | 0.0      | 4.1  | ----- |
| Hysterectomy.....                          | 17              | 5.9                 | 0.6  | ----- | 5.9     | 1.5  | ----- | 5.9      | 2.7  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



# WALTHAM HOSPITAL

Medicare Provider Number: 220076

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.1 years  
Proportion female..... 58.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 22.1 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 13.2 %  
Admitted for emergency..... 62.7 %

### COMORBIDITIES:

Cancer..... 7.6 %  
Chronic cardiovascular disease..... 37.6 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 2.5 %  
Chronic pulmonary disease..... 10.2 %  
Cerebrovascular degeneration..... 4.8 %  
Diabetes mellitus..... 6.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 92.2%  
State ..... 5.9%  
Outside State ..... 1.9%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.2 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 275  
Occupancy Rate ..... 58.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... (Not Available)  
Case Mix Index (CMI) ..... 1.1931

### STAFFING:

Total Number of Physicians..... 133  
Percent of Physicians Board  
Certified Specialists..... 92.5 %  
Medical Residents/Interns ..... 2  
Registered Nurses..... 164  
Licensed Practical Nurses ..... 27

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates



# WHIDDEN MEMORIAL HOSPITAL

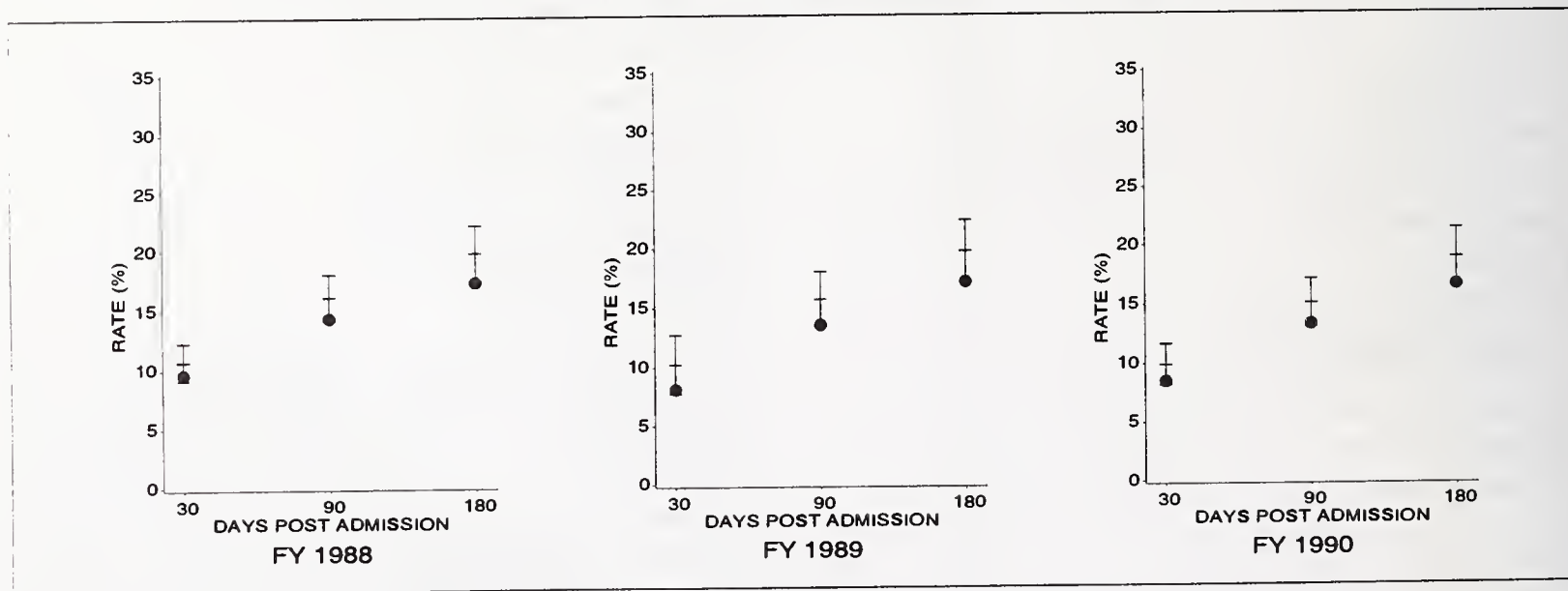
103 GARLAND STREET  
EVERETT, MA 02149  
Medicare Provider Number: 220042

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1779            | 8.5                 | 9.9  | 0.9  | 13.3    | 15.1 | 1.0  | 16.6     | 18.9 | 1.2  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 83              | 30.1                | 25.4 | 5.9  | 36.1    | 29.4 | 7.4  | 42.2     | 32.7 | 8.6  |
| Congestive Heart Failure.....              | 109             | 10.1                | 16.7 | 6.5  | 23.9    | 26.8 | 6.2  | 30.3     | 33.6 | 5.5  |
| Pneumonia/Influenza.....                   | 91              | 11.0                | 17.3 | 6.9  | 17.6    | 24.2 | 8.0  | 24.2     | 28.9 | 8.9  |
| Chronic Obstructive Pulmonary Disease..... | 50              | 0.0                 | 5.7  | ---- | 6.0     | 10.7 | ---- | 8.0      | 14.6 | ---- |
| Transient Cerebral Ischemia.....           | 32              | 3.1                 | 1.8  | ---- | 3.1     | 4.0  | ---- | 3.1      | 6.4  | ---- |
| Stroke.....                                | 49              | 16.3                | 21.1 | ---- | 26.5    | 28.1 | ---- | 34.7     | 31.8 | ---- |
| Hip Fracture.....                          | 43              | 11.6                | 8.0  | ---- | 14.0    | 13.7 | ---- | 18.6     | 17.5 | ---- |
| Sepsis.....                                | 30              | 13.3                | 25.9 | ---- | 30.0    | 33.4 | ---- | 33.3     | 37.6 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 10              | 10.0                | 3.9  | ---- | 10.0    | 8.0  | ---- | 10.0     | 11.9 | ---- |
| Carotid Endarterectomy.....                | 2               | 0.0                 | 2.1  | ---- | 0.0     | 4.1  | ---- | 0.0      | 6.3  | ---- |
| Hip Replacement/Reconstruction.....        | 18              | 11.1                | 7.3  | ---- | 16.7    | 12.6 | ---- | 22.2     | 16.3 | ---- |
| Open Reduction of Hip Fracture.....        | 25              | 12.0                | 6.6  | ---- | 12.0    | 11.6 | ---- | 16.0     | 15.1 | ---- |
| Prostatectomy.....                         | 23              | 4.3                 | 1.2  | ---- | 8.7     | 2.8  | ---- | 13.0     | 4.9  | ---- |
| Cholecystectomy.....                       | 25              | 0.0                 | 3.3  | ---- | 4.0     | 6.4  | ---- | 4.0      | 8.7  | ---- |
| Hysterectomy.....                          | 3               | 0.0                 | 3.3  | ---- | 0.0     | 7.8  | ---- | 0.0      | 11.9 | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# WHIDDEN MEMORIAL HOSPITAL

Medicare Provider Number: 220042

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.5 years  
Proportion female..... 63.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 24.6 %  
Transferred from skilled nursing facility..... 0.6 %  
Admitted for elective procedure..... 9.1 %  
Admitted for emergency..... 71.2 %

### COMORBIDITIES:

Cancer..... 6.4 %  
Chronic cardiovascular disease..... 36.3 %  
Chronic liver disease..... 1.5 %  
Chronic renal disease..... 2.8 %  
Chronic pulmonary disease..... 36.0 %  
Cerebrovascular degeneration..... 5.1 %  
Diabetes mellitus..... 9.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 49.3%  
State ..... 49.8%  
Outside State ..... 0.9%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 11.6 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 163  
Occupancy Rate ..... 76.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 49.7 %  
Case Mix Index (CMI) ..... 1.1385

### STAFFING:

Total Number of Physicians..... 74  
Percent of Physicians Board  
Certified Specialists ..... 66.2 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 120  
Licensed Practical Nurses ..... 24

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# WINCHESTER HOSPITAL

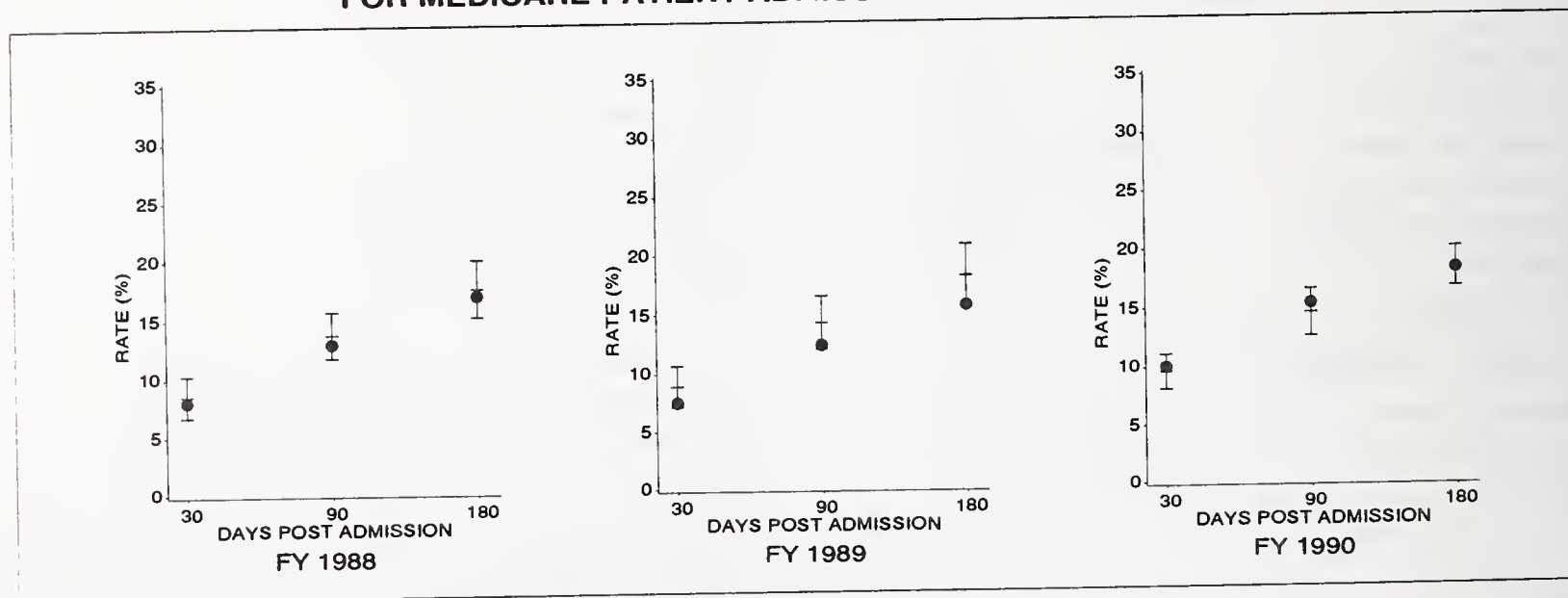
41 HIGHLAND AVE  
WINCHESTER, MA 01890  
Medicare Provider Number: 220105

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2147            | 10.0                | 9.6  | 0.8   | 15.4    | 14.6 | 1.0   | 18.3     | 18.4 | 0.8   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 107             | 24.3                | 28.1 | 7.9   | 29.0    | 31.8 | 7.6   | 32.7     | 34.8 | 7.7   |
| Congestive Heart Failure.....              | 86              | 14.0                | 16.2 | 4.7   | 22.1    | 25.6 | 5.9   | 30.2     | 32.1 | 5.8   |
| Pneumonia/Influenza.....                   | 118             | 16.9                | 14.8 | 5.6   | 22.0    | 20.7 | 5.5   | 22.9     | 24.8 | 8.1   |
| Chronic Obstructive Pulmonary Disease..... | 38              | 2.6                 | 6.3  | ----- | 5.3     | 11.7 | ----- | 10.5     | 16.1 | ----- |
| Transient Cerebral Ischemia.....           | 38              | 0.0                 | 2.1  | ----- | 2.6     | 4.7  | ----- | 2.6      | 7.5  | ----- |
| Stroke.....                                | 76              | 25.0                | 21.6 | 5.7   | 30.3    | 27.8 | 6.6   | 31.6     | 31.7 | 7.1   |
| Hip Fracture.....                          | 59              | 13.6                | 7.5  | 6.1   | 16.9    | 13.3 | 5.9   | 16.9     | 17.4 | 6.4   |
| Sepsis.....                                | 19              | 21.1                | 27.5 | ----- | 26.3    | 37.3 | ----- | 26.3     | 42.7 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 9               | 11.1                | 2.0  | ----- | 11.1    | 4.3  | ----- | 11.1     | 6.7  | ----- |
| Carotid Endarterectomy.....                | 10              | 10.0                | 1.2  | ----- | 10.0    | 2.2  | ----- | 10.0     | 3.3  | ----- |
| Hip Replacement/Reconstruction.....        | 35              | 5.7                 | 5.0  | ----- | 5.7     | 9.0  | ----- | 5.7      | 11.8 | ----- |
| Open Reduction of Hip Fracture.....        | 23              | 8.7                 | 6.1  | ----- | 17.4    | 11.3 | ----- | 17.4     | 15.1 | ----- |
| Prostatectomy.....                         | 39              | 0.0                 | 1.0  | ----- | 0.0     | 2.4  | ----- | 2.6      | 4.2  | ----- |
| Cholecystectomy.....                       | 27              | 3.7                 | 2.2  | ----- | 3.7     | 4.3  | ----- | 3.7      | 6.0  | ----- |
| Hysterectomy.....                          | 9               | 0.0                 | 0.7  | ----- | 0.0     | 1.8  | ----- | 0.0      | 3.1  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# WINCHESTER HOSPITAL

Medicare Provider Number: 220105

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.1 years  
Proportion female..... 63.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 28.2 %  
Transferred from skilled nursing facility..... 2.3 %  
Admitted for elective procedure..... 11.8 %  
Admitted for emergency..... 15.1 %

### COMORBIDITIES:

Cancer..... 8.5 %  
Chronic cardiovascular disease..... 38.3 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 2.7 %  
Chronic pulmonary disease..... 17.0 %  
Cerebrovascular degeneration..... 5.4 %  
Diabetes mellitus..... 8.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 91.7%  
State ..... 6.0%  
Outside State ..... 2.3%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.8 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 222  
Occupancy Rate ..... 66.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 32.7 %  
Case Mix Index (CMI) ..... 1.1528

### STAFFING:

Total Number of Physicians..... 114  
Percent of Physicians Board  
Certified Specialists..... 86.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 208  
Licensed Practical Nurses ..... 42

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# WING MEMORIAL HOSPITAL

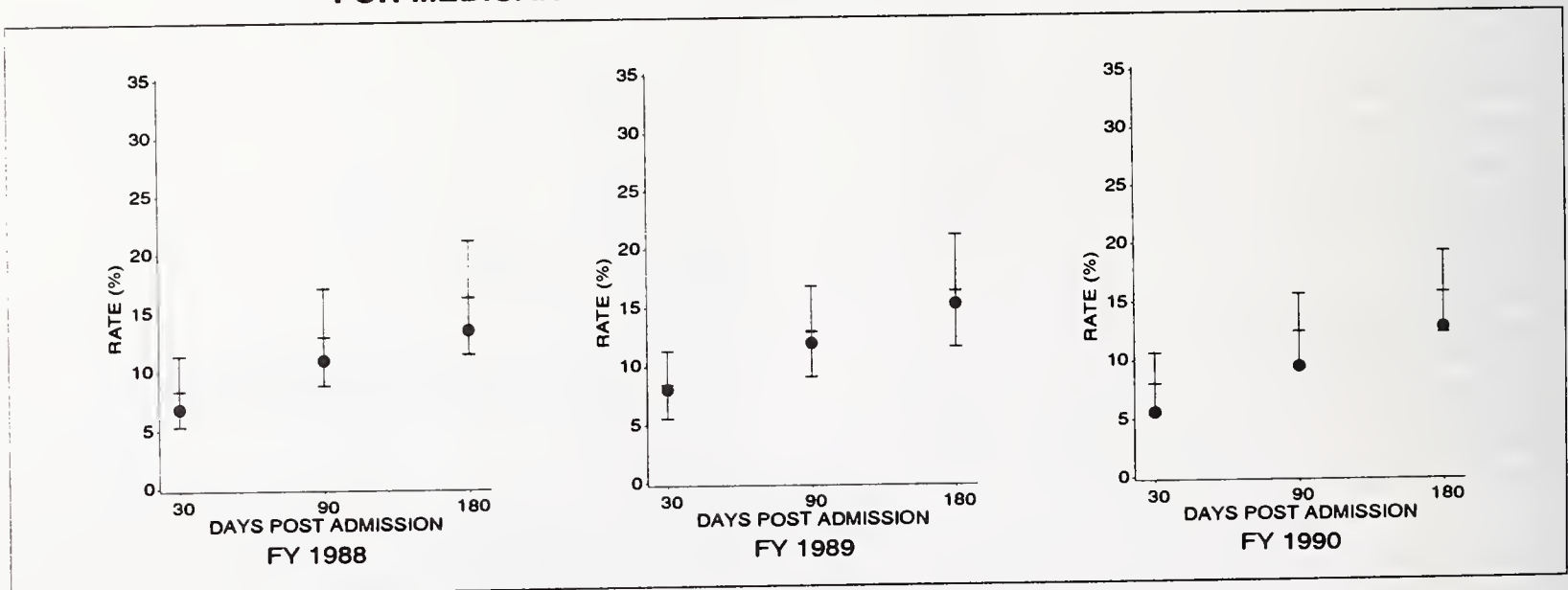
WRIGHT ST  
PALMER, MA 01069  
Medicare Provider Number: 220030

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 732             | 5.6                 | 8.0  | 1.3   | 9.4     | 12.4 | 1.6   | 12.7     | 15.7 | 1.7   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 21              | 33.3                | 23.0 | ----- | 38.1    | 25.8 | ----- | 38.1     | 28.5 | ----- |
| Congestive Heart Failure.....              | 46              | 10.9                | 16.2 | ----- | 19.6    | 25.9 | ----- | 30.4     | 33.2 | ----- |
| Pneumonia/Influenza.....                   | 33              | 9.1                 | 11.9 | ----- | 12.1    | 16.4 | ----- | 15.2     | 19.5 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 9               | 0.0                 | 8.0  | ----- | 0.0     | 14.1 | ----- | 0.0      | 18.6 | ----- |
| Transient Cerebral Ischemia.....           | 8               | 0.0                 | 3.3  | ----- | 12.5    | 7.1  | ----- | 12.5     | 11.2 | ----- |
| Stroke.....                                | 18              | 16.7                | 19.0 | ----- | 22.2    | 25.3 | ----- | 22.2     | 29.5 | ----- |
| Hip Fracture.....                          | 19              | 5.3                 | 6.0  | ----- | 10.5    | 11.0 | ----- | 15.8     | 14.2 | ----- |
| Sepsis.....                                | 6               | 33.3                | 29.6 | ----- | 33.3    | 39.1 | ----- | 33.3     | 45.0 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 1               | 0.0                 | 1.3  | ----- | 0.0     | 2.7  | ----- | 0.0      | 4.0  | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 14              | 0.0                 | 3.7  | ----- | 7.1     | 7.0  | ----- | 7.1      | 9.3  | ----- |
| Open Reduction of Hip Fracture.....        | 5               | 0.0                 | 4.7  | ----- | 0.0     | 8.6  | ----- | 20.0     | 11.1 | ----- |
| Prostatectomy.....                         | 21              | 0.0                 | 1.0  | ----- | 0.0     | 2.3  | ----- | 0.0      | 3.8  | ----- |
| Cholecystectomy.....                       | 12              | 0.0                 | 3.7  | ----- | 0.0     | 6.3  | ----- | 0.0      | 7.7  | ----- |
| Hysterectomy.....                          | 3               | 0.0                 | 0.2  | ----- | 0.0     | 0.6  | ----- | 0.0      | 1.0  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# WING MEMORIAL HOSPITAL

Medicare Provider Number: 220030

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 74.5 years |
| Proportion female.....        | 58.9 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 32.9 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 0.8 %  |
| Admitted for emergency.....                    | 38.1 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 7.4 %  |
| Chronic cardiovascular disease..... | 40.7 % |
| Chronic liver disease.....          | 0.5 %  |
| Chronic renal disease.....          | 2.6 %  |
| Chronic pulmonary disease.....      | 12.4 % |
| Cerebrovascular degeneration.....   | 5.5 %  |
| Diabetes mellitus.....              | 6.6 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 79.9%  |
| State .....         | 17.9%  |
| Outside State ..... | 2.2%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |           |
|----------------|-----------|
| Hospital ..... | 6.7 Days  |
| State .....    | 10.1 Days |
| National ..... | 8.6 Days  |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 70                  |
| Occupancy Rate .....       | 58.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 49.6 %              |
| Case Mix Index (CMI) ..... | 1.0430              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 36     |
| Percent of Physicians Board<br>Certified Specialists ..... | 69.4 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 63     |
| Licensed Practical Nurses .....                            | 8      |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | Yes |
| Hospice Care .....                    | Yes |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation.....       | No  |
| Psychiatric .....         | Yes |
| Medicare Swing Beds ..... | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates



# WINTHROP COMMUNITY HOSPITAL

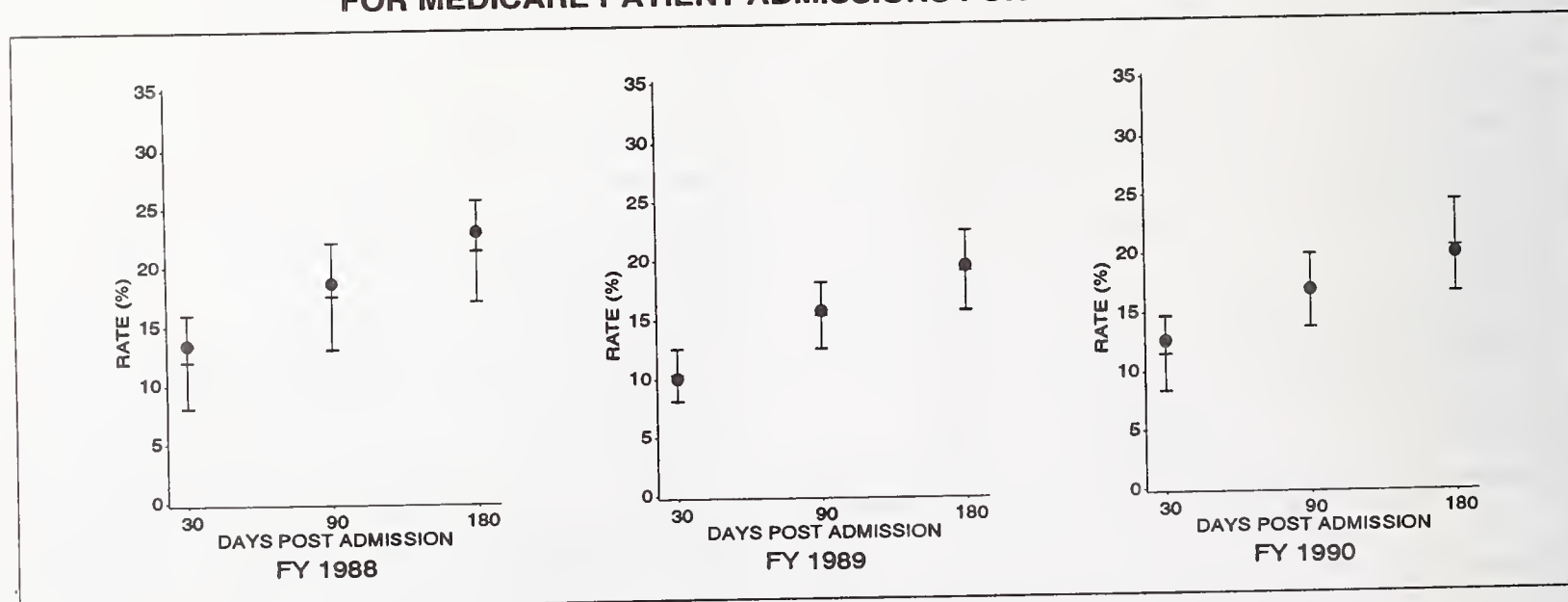
40 LINCOLN ST  
WINTHROP, MA 02152  
Medicare Provider Number: 220097

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 740             | 12.6                | 11.5 | 1.6   | 16.9    | 16.8 | 1.6   | 19.9     | 20.5 | 1.9   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 38              | 26.3                | 26.6 | ----- | 26.3    | 29.9 | ----- | 26.3     | 32.9 | ----- |
| Congestive Heart Failure.....              | 51              | 21.6                | 18.3 | 8.5   | 31.4    | 27.9 | 6.9   | 33.3     | 34.3 | 6.7   |
| Pneumonia/Influenza.....                   | 70              | 12.9                | 15.5 | 5.2   | 18.6    | 21.3 | 7.2   | 22.9     | 25.4 | 7.4   |
| Chronic Obstructive Pulmonary Disease..... | 33              | 3.0                 | 5.3  | ----- | 6.1     | 9.9  | ----- | 6.1      | 13.7 | ----- |
| Transient Cerebral Ischemia.....           | 8               | 0.0                 | 4.9  | ----- | 0.0     | 10.2 | ----- | 0.0      | 14.5 | ----- |
| Stroke.....                                | 30              | 26.7                | 22.3 | ----- | 30.0    | 30.4 | ----- | 36.7     | 34.6 | ----- |
| Hip Fracture.....                          | 13              | 7.7                 | 7.7  | ----- | 15.4    | 13.8 | ----- | 23.1     | 17.8 | ----- |
| Sepsis.....                                | 5               | 80.0                | 31.8 | ----- | 80.0    | 40.8 | ----- | 80.0     | 45.2 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 3               | 0.0                 | 2.6  | ----- | 0.0     | 5.3  | ----- | 0.0      | 7.5  | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 2               | 0.0                 | 9.9  | ----- | 0.0     | 18.1 | ----- | 50.0     | 22.8 | ----- |
| Open Reduction of Hip Fracture.....        | 7               | 0.0                 | 5.3  | ----- | 14.3    | 10.4 | ----- | 14.3     | 14.5 | ----- |
| Prostatectomy.....                         | 17              | 11.8                | 1.2  | ----- | 11.8    | 2.9  | ----- | 11.8     | 5.0  | ----- |
| Cholecystectomy.....                       | 6               | 0.0                 | 2.8  | ----- | 0.0     | 4.8  | ----- | 0.0      | 6.0  | ----- |
| Hysterectomy.....                          | 1               | 0.0                 | 0.0  | ----- | 0.0     | 0.1  | ----- | 0.0      | 0.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# WINTHROP COMMUNITY HOSPITAL

Medicare Provider Number: 220097

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 79.0 years  
Proportion female..... 65.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 13.0 %  
Transferred from skilled nursing facility..... 0.3 %  
Admitted for elective procedure..... 5.9 %  
Admitted for emergency..... 85.6 %

### COMORBIDITIES:

Cancer..... 3.6 %  
Chronic cardiovascular disease..... 31.2 %  
Chronic liver disease..... 0.3 %  
Chronic renal disease..... 0.7 %  
Chronic pulmonary disease..... 16.5 %  
Cerebrovascular degeneration..... 3.5 %  
Diabetes mellitus..... 5.1 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 88.9%  
State ..... 9.5%  
Outside State ..... 1.6%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.6 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 102  
Occupancy Rate ..... 73.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 56.7 %  
Case Mix Index (CMI) ..... 1.0505

### STAFFING:

Total Number of Physicians..... 67  
Percent of Physicians Board  
Certified Specialists..... 61.2 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 43  
Licensed Practical Nurses ..... 28

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# WORCESTER CITY HOSPITAL

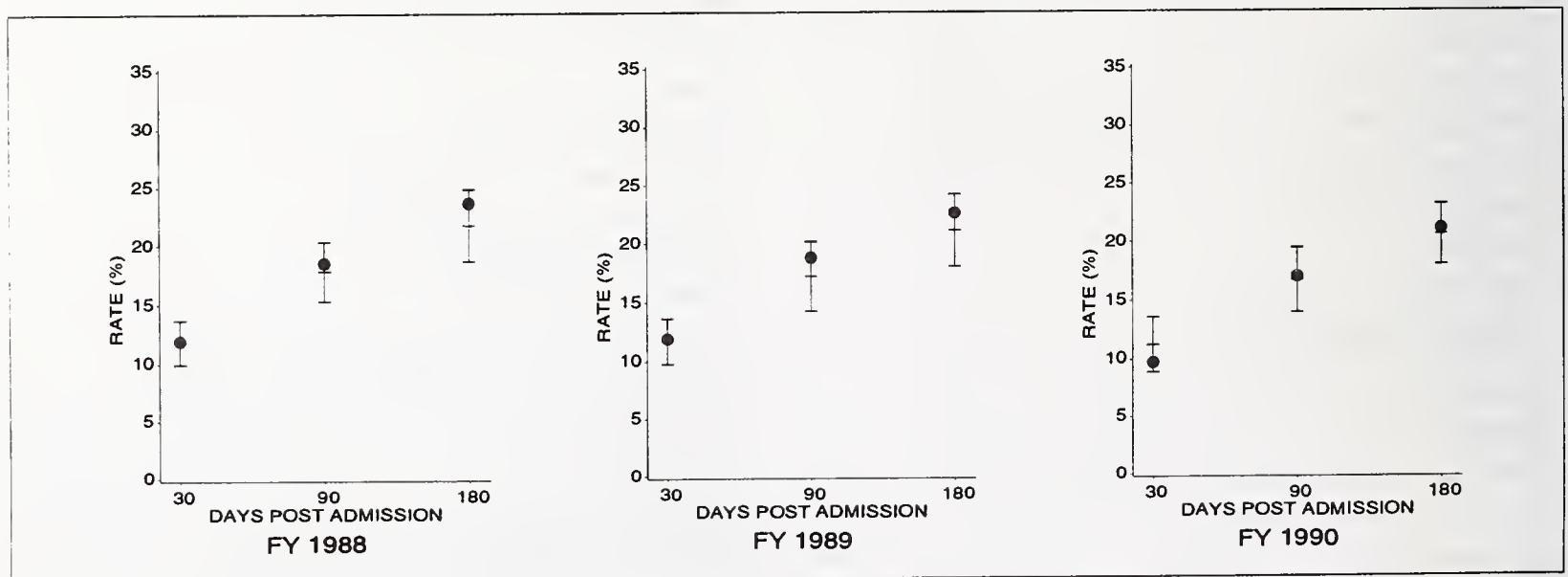
26 QUEEN ST  
WORCESTER, MA 01610  
Medicare Provider Number: 220115

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1166            | 9.7                 | 11.2 | 1.2   | 17.0    | 16.7 | 1.4   | 21.1     | 20.6 | 1.3   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 30              | 33.3                | 30.4 | ----- | 36.7    | 33.1 | ----- | 40.0     | 35.7 | ----- |
| Congestive Heart Failure.....              | 62              | 14.5                | 15.3 | 5.5   | 24.2    | 24.4 | 5.8   | 29.0     | 30.9 | 6.1   |
| Pneumonia/Influenza.....                   | 89              | 13.5                | 17.7 | 7.0   | 19.1    | 24.4 | 6.3   | 24.7     | 28.7 | 6.2   |
| Chronic Obstructive Pulmonary Disease..... | 13              | 7.7                 | 10.4 | ----- | 23.1    | 18.4 | ----- | 38.5     | 24.3 | ----- |
| Transient Cerebral Ischemia.....           | 14              | 14.3                | 1.6  | ----- | 14.3    | 3.7  | ----- | 14.3     | 5.9  | ----- |
| Stroke.....                                | 28              | 28.6                | 28.8 | ----- | 35.7    | 36.8 | ----- | 39.3     | 40.7 | ----- |
| Hip Fracture.....                          | 47              | 6.4                 | 6.7  | ----- | 10.6    | 11.6 | ----- | 12.8     | 15.0 | ----- |
| Sepsis.....                                | 3               | 33.3                | 9.3  | ----- | 33.3    | 12.5 | ----- | 33.3     | 15.6 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 4               | 0.0                 | 2.1  | ----- | 0.0     | 4.4  | ----- | 0.0      | 6.6  | ----- |
| Carotid Endarterectomy.....                | 3               | 33.3                | 1.7  | ----- | 33.3    | 3.0  | ----- | 33.3     | 4.7  | ----- |
| Hip Replacement/Reconstruction.....        | 18              | 5.6                 | 4.1  | ----- | 11.1    | 7.8  | ----- | 11.1     | 10.5 | ----- |
| Open Reduction of Hip Fracture.....        | 25              | 0.0                 | 5.8  | ----- | 0.0     | 10.1 | ----- | 4.0      | 13.0 | ----- |
| Prostatectomy.....                         | 20              | 0.0                 | 1.1  | ----- | 0.0     | 2.6  | ----- | 0.0      | 4.5  | ----- |
| Cholecystectomy.....                       | 24              | 8.3                 | 5.1  | ----- | 12.5    | 9.4  | ----- | 12.5     | 12.4 | ----- |
| Hysterectomy.....                          | 3               | 0.0                 | 1.2  | ----- | 0.0     | 2.5  | ----- | 0.0      | 3.9  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# WORCESTER CITY HOSPITAL

Medicare Provider Number: 220115

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.6 years  
Proportion female..... 56.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 23.6 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 12.3 %  
Admitted for emergency..... 75.3 %

### COMORBIDITIES:

Cancer..... 6.7 %  
Chronic cardiovascular disease..... 36.9 %  
Chronic liver disease..... 1.4 %  
Chronic renal disease..... 2.8 %  
Chronic pulmonary disease..... 18.1 %  
Cerebrovascular degeneration..... 5.9 %  
Diabetes mellitus..... 6.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 94.5%  
State ..... 3.3%  
Outside State ..... 2.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 13.1 Days  
State ..... 10.1 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 62  
Ownership/Control..... Local Government  
Case Mix Index (CMI) ..... 1.3499

### STAFFING:

Medical Residents/Interns ..... 3  
Registered Nurses..... 170  
Licensed Practical Nurses ..... 27

### SPECIALTY SERVICES:

Burn Unit ..... Yes  
Coronary Care Unit ..... Yes  
Hospice Care ..... No  
Intensive Care Unit ..... Yes  
Organ Transplant ..... No  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MASSACHUSETTS

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |     |         |      |     |          |      |     |
|--------------------------------------------|--------------------|---------------------|------|-----|---------|------|-----|----------|------|-----|
|                                            |                    | 30 DAYS             |      |     | 90 DAYS |      |     | 180 DAYS |      |     |
|                                            |                    | OBS                 | PRED | SD* | OBS     | PRED | SD* | OBS      | PRED | SD* |
| ALL CAUSES.....                            | 175,437            | 8.5                 | 9.4  | 0.1 | 13.5    | 14.5 | 0.1 | 17.1     | 18.1 | 0.1 |
| CONDITIONS:                                |                    |                     |      |     |         |      |     |          |      |     |
| Acute Myocardial Infarction.....           | 6,142              | 24.2                | 25.4 | 0.8 | 29.2    | 28.9 | 1.2 | 31.9     | 31.8 | 0.9 |
| Congestive Heart Failure.....              | 9,023              | 13.6                | 15.6 | 0.4 | 22.5    | 24.6 | 0.5 | 29.2     | 31.1 | 0.6 |
| Pneumonia/Influenza.....                   | 8,383              | 15.3                | 17.4 | 0.5 | 21.6    | 24.0 | 0.5 | 25.9     | 28.2 | 0.7 |
| Chronic Obstructive Pulmonary Disease..... | 2,241              | 7.5                 | 8.1  | 1.1 | 12.9    | 14.1 | 1.3 | 17.4     | 18.7 | 1.4 |
| Transient Cerebral Ischemia.....           | 2,266              | 1.3                 | 1.9  | 0.6 | 3.6     | 4.4  | 0.8 | 6.3      | 7.0  | 0.9 |
| Stroke.....                                | 5,876              | 18.2                | 20.5 | 0.6 | 25.7    | 27.6 | 0.6 | 30.0     | 31.6 | 0.6 |
| Hip Fracture.....                          | 4,641              | 6.0                 | 7.0  | 0.7 | 10.7    | 12.5 | 0.5 | 14.1     | 16.2 | 0.6 |
| Sepsis.....                                | 1,587              | 22.4                | 24.7 | 1.5 | 30.2    | 32.8 | 1.6 | 35.2     | 37.6 | 1.7 |
| PROCEDURES:                                |                    |                     |      |     |         |      |     |          |      |     |
| Angioplasty.....                           | 772                | 2.7                 | 2.8  | 1.0 | 3.4     | 4.0  | 1.2 | 4.7      | 5.1  | 1.2 |
| Coronary Artery Bypass Graft.....          | 1,548              | 6.0                 | 6.3  | 0.8 | 8.1     | 9.4  | 1.0 | 8.7      | 10.8 | 1.0 |
| Initial Pacemaker Insertion.....           | 1,281              | 3.0                 | 3.5  | 0.9 | 5.8     | 6.6  | 1.3 | 8.8      | 9.4  | 1.4 |
| Carotid Endarterectomy.....                | 482                | 1.9                 | 1.4  | 0.8 | 2.1     | 2.6  | 0.9 | 3.1      | 3.9  | 1.1 |
| Hip Replacement/Reconstruction.....        | 3,245              | 2.8                 | 3.5  | 0.4 | 5.2     | 6.5  | 0.6 | 7.1      | 8.7  | 0.6 |
| Open Reduction of Hip Fracture.....        | 2,353              | 5.4                 | 6.4  | 0.7 | 10.2    | 11.7 | 0.8 | 13.6     | 15.5 | 1.0 |
| Prostatectomy.....                         | 4,928              | 0.8                 | 1.0  | 0.2 | 2.2     | 2.3  | 0.2 | 3.8      | 4.0  | 0.3 |
| Cholecystectomy.....                       | 2,584              | 2.4                 | 2.9  | 0.5 | 4.3     | 5.3  | 0.7 | 5.4      | 7.1  | 0.8 |
| Hysterectomy.....                          | 1,253              | 0.6                 | 0.7  | 0.3 | 1.2     | 1.6  | 0.5 | 2.4      | 2.5  | 1.1 |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.3 years  
Proportion female..... 57.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 34.1 %  
Transferred from skilled nursing facility..... 2.0 %  
Admitted for elective procedure..... 19.7 %  
Admitted for emergency..... 53.2 %

### COMORBIDITIES:

Cancer..... 8.2 %  
Chronic cardiovascular disease..... 36.8 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 3.3 %  
Chronic pulmonary disease..... 14.2 %  
Cerebrovascular degeneration..... 5.4 %  
Diabetes mellitus..... 7.8 %

# ALL STATES

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 6,542,299          | 9.0                 | 9.0  | ----- | 13.9    | 13.7 | ----- | 17.3     | 17.1 | ----- |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 204,673            | 25.3                | 25.6 | ----- | 29.5    | 28.7 | ----- | 32.1     | 31.4 | ----- |
| Congestive Heart Failure.....              | 335,426            | 14.3                | 14.4 | ----- | 22.9    | 22.8 | ----- | 29.2     | 29.0 | ----- |
| Pneumonia/Influenza.....                   | 313,303            | 15.3                | 15.5 | ----- | 21.5    | 21.3 | ----- | 25.5     | 25.1 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 107,387            | 8.0                 | 8.0  | ----- | 14.1    | 14.0 | ----- | 18.7     | 18.5 | ----- |
| Transient Cerebral ischemia.....           | 96,866             | 1.8                 | 1.8  | ----- | 4.0     | 4.0  | ----- | 6.4      | 6.5  | ----- |
| Stroke.....                                | 241,803            | 19.7                | 19.8 | ----- | 26.5    | 26.3 | ----- | 30.4     | 30.0 | ----- |
| Hip Fracture.....                          | 163,386            | 6.7                 | 6.5  | ----- | 11.7    | 11.5 | ----- | 15.1     | 15.0 | ----- |
| Sepsis.....                                | 80,999             | 25.6                | 25.7 | ----- | 34.6    | 33.8 | ----- | 39.8     | 38.6 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 58,026             | 3.0                 | 3.0  | ----- | 4.0     | 4.0  | ----- | 5.0      | 4.9  | ----- |
| Coronary Artery Bypass Graft.....          | 80,798             | 6.0                 | 5.7  | ----- | 8.3     | 8.1  | ----- | 9.5      | 9.2  | ----- |
| Initial Pacemaker Insertion.....           | 49,642             | 3.2                 | 3.3  | ----- | 6.5     | 6.3  | ----- | 9.1      | 9.1  | ----- |
| Carotid Endarterectomy.....                | 29,990             | 1.6                 | 1.5  | ----- | 2.8     | 2.8  | ----- | 4.0      | 4.1  | ----- |
| Hip Replacement/Reconstruction.....        | 122,156            | 3.4                 | 3.2  | ----- | 6.2     | 5.9  | ----- | 8.1      | 8.0  | ----- |
| Open Reduction of Hip Fracture.....        | 80,075             | 6.1                 | 6.0  | ----- | 11.2    | 11.0 | ----- | 14.5     | 14.5 | ----- |
| Prostatectomy.....                         | 211,087            | 0.9                 | 1.0  | ----- | 2.2     | 2.3  | ----- | 3.7      | 3.8  | ----- |
| Cholecystectomy.....                       | 124,259            | 2.9                 | 2.7  | ----- | 5.0     | 4.9  | ----- | 6.5      | 6.5  | ----- |
| Hysterectomy.....                          | 53,905             | 0.7                 | 0.7  | ----- | 1.4     | 1.5  | ----- | 2.2      | 2.4  | ----- |

\* The Standard Deviation (SD) is not calculated.

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

|                                                |            |                                     |        |
|------------------------------------------------|------------|-------------------------------------|--------|
| DEMOGRAPHICS:                                  |            | COMORBIDITIES:                      |        |
| Average age at admission.....                  | 74.1 years | Cancer.....                         | 7.6 %  |
| Proportion female.....                         | 55.9 %     | Chronic cardiovascular disease..... | 36.6 % |
| ADMISSION SOURCES/TYPES:                       |            | Chronic liver disease.....          | 1.0 %  |
| Referred by personal or HMO physician.....     | 46.1 %     | Chronic renal disease.....          | 3.4 %  |
| Transferred from skilled nursing facility..... | 1.1 %      | Chronic pulmonary disease.....      | 15.0 % |
| Admitted for elective procedure.....           | 22.0 %     | Cerebrovascular degeneration.....   | 3.9 %  |
| Admitted for emergency.....                    | 46.5 %     | Diabetes mellitus.....              | 8.0 %  |





# **Hospital Comments**



# Addison Gilbert Hospital

298 Washington Street, Gloucester, MA 01930  
(508) 283-4000

**Medicare #220128**

**March 13, 1992**

**Medicare Hospital Information, HCFA  
Bureau of Data Management & Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, MD 21207**

**RE: Comments on Hospital Mortality Rates**

**ATTENTION: Mr. Robert Moore**

**The in-patient hospital mortality rates for Medicare beneficiaries reflect the fact that the Addison Gilbert Hospital patient census for individual categories excepting CHF and pneumonia are too small for statistical significance. The statistics for CHF and pneumonia show that the Addison Gilbert is within the predicted ranges. Similarly, the statistics for overall mortality show that the Addison Gilbert Hospital is well within predicted ranges.**

**We feel that the statistics reflect the institution's continuing commitment to quality care.**

**Sincerely,**

**Kathryn Melendy  
President**

**KM:sto**





# Baystate Medical Center

*Member of Baystate Health Systems*

Springfield, Massachusetts 01199

413-784-0000

MEDICARE PROVIDER: 220077

March 12, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administrator  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
Attn: Robert Moore

Re: Baystate Medical Center's Response to FY 1990 Medicare  
Mortality Data

To Whom it May Concern:

We have analyzed our hospital's Medicare mortality data for fiscal year 1990. As a regional referral center in Western Massachusetts which cares for large groups of patients with high degrees of severity of illness and with a philosophical commitment never to turn away patients in need, Baystate Medical Center is in agreement that we have no areas of medical practice where excessive death rates are a concern.

Looking at mortality rates up to 180 days after admission naturally has implications for out of hospital care as well. While Baystate Medical Center frequently has no control over the management of patients after they leave the hospital, we are committed to strengthening our efforts in improving communications with both patients and their physicians after hospitalization to assess long term outcomes.

Baystate Medical Center also has recently received information from our state PRO (Peer Review Organization) which intensively analyzes the quality of care provided Medicare patients. It was encouraging to learn that for Massachusetts hospitals we had among the lowest physician-confirmed generic quality of care screen failure rates. These screens are markers for quality of care problems. This was especially gratifying despite the fact that we care for a disproportionate share of extremely ill and high risk patients.

Page 2  
3/12/92  
Dr. Wilensky

We also note that for two consecutive years, at 90 days after admission to Baystate Medical Center, there were no deaths in patients with a diagnosis of transient cerebral ischemia; at 30 days after admission, there were no deaths for those patients who underwent prostatectomy. In addition to the importance this success has to each one of the patients who had these conditions or procedures, Baystate Medical Center also recognizes its commitment to research and is constantly trying to provide improved methods of dealing with medical problems. In this instance, transient cerebral ischemia represents a condition which can be a warning of a stroke. The fact that no deaths were observed at 90 days of follow-up for two years in a row for this group of patients gives us reason to believe that our therapeutic interventions will have broader importance to society.

In summary, Baystate Medical Center will take this mortality data and utilize it along with the information provided by our intensive internal quality improvement programs in our quest to heal the sick and diminish suffering for all patients we are privileged to care for.

Sincerely,



Michael J. Daly  
President, Baystate Medical Center

MJD:LGS:cl

medicare/c





# Beth Israel Hospital Boston

330 Brookline Avenue  
Boston, MA 02215

A major teaching hospital  
of Harvard Medical School


A constituent agency of  
Combined Jewish  
Philanthropies

Mitchell T. Rabkin, MD  
*President*

(617) 735-2000

Medicare Provider #220086

19 March 1992



Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, MD 21207-5187  
ATTN: Robert Moore

*Gail*  
Dear Ms. ~~Wilensky~~:

We are in receipt of the 1990 HCFA Mortality Report and we appreciate the opportunity to comment on its contents and to use this information as another input to our ongoing quality assurance programs.

As part of our quality assessment and improvement program all deaths in the hospital receive some level of monitoring and are reviewed on a continuous basis. Each case is reviewed addressing causation and appropriateness of care provided resulting in analysis, education and communication among our clinical and training staff.

In specific reference to the data provided, we continue to be concerned about the adequacy of case-mix adjustment in the methodology in this and previous years. For example, coronary artery bypass graft patients are grouped together with patients who have had both valve replacement and coronary artery bypass graft surgery at the same time. The mortality rates for patients with both procedures is significantly higher than for patients with coronary artery bypass graft alone. Continuing to group these patients together biases the analysis in comparing hospitals with a significant number of the more complicated cases. We suggest that you group the patients with coronary artery bypass graft alone in a separate category from patients with both procedures.





Medicare Provider #220086

We will continue to make corrective action plans where indicated. We also are actively participating in research based on outcomes rather than just mortality.

Thank you for the opportunity to comment.

Sincerely,

Mitchell T. Rabkin, M.D.  
President

jf

P. S. Congratulations on your new role!  
Get off the flying paw .....



# BEVERLY HOSPITAL

*More than a Hospital...a Family Centered Health Care System.*

Herrick & Heather Streets • Beverly, MA 01915 • 508/922-3000

Medicare Provider No: 220033

March 12, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
Attention: Robert Moore

## COMMENTS ON HCFA MORTALITY DATA FY 1990

Thank you for the opportunity to review and evaluate the HCFA 1990 mortality data for Beverly Hospital. A review of the methodology used to prepare these data shows some changes to previous years, including a revision of variables used to compute the predicted mortality rates. One *random* admission is chosen, rather than the last admission during the year, and observed mortality rates are presented in three timeframes - 30, 90, and 180 days post admit date. The development of a mortality prediction rate includes factors which evaluate patient's probabilities of death. They include demographic characteristics, comorbidities, prior admissions, admission type, admission source, diagnostic and procedure information. The information presented includes deaths during an admission, as well as deaths after discharge from the hospital. Although the new methodology was applied retrospectively to 1988 and 1989, this letter will primarily address the 1990 data, as the other two years have already been reviewed and published.

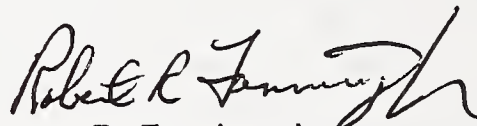
The 1990 data reports an observed mortality rate of 17.2% of 1,873 (322) Medicare patients who expired in the 180 days following the random admission to Beverly Hospital. The list included 157 patients who died during the random admission and 165 who expired after discharge from the randomly selected admission. After applying the formula suggested to compute the standard deviation and create a predicted range, the only category which shows a higher than predicted mortality rate was the procedure codes for prostatectomy. All of the other Beverly Hospital observed mortality rates fall into the predicted ranges for all diagnostic and procedure categories. The mortality rate of 3.0% of 67 Medicare patients who had a prostatectomy reflects two deaths. Comparative data from the MedisGroups database shows that DRG 336 [Major male procedures with comorbid conditions], which included both patients, has an average admission severity of 1.11, compared to the national range of .66 - 1.10. These patients present a more involved clinical picture than the other patients represented in this procedure category.

It is important to recognize that all dimensions of the quality of care rendered at Beverly Hospital are objectively evaluated on an ongoing basis. Indicators are chosen and criteria are developed, approved and monitored on a concurrent and retrospective basis. Mortality review continues to be one of the key monthly educational indicators for all clinical departments. The actual mortality rate for Medicare patients at Beverly Hospital is 7.9% and the average acute/SNF length of stay is 10.0 days. Our commitment to provide high quality care and to continually identify opportunities to improve care are the main objectives of the Board of Trustees, the Medical Staff, and the management of Beverly Hospital.

Beverly Hospital has been using MedisGroups, a nationally recognized system to measure admission severity of illness, since 1987. Patients are categorized retrospectively on a scale of 0-4 (4 being the most clinically unstable). The system allows hospitals to compare their information with a national database to identify areas of quality and areas for improvement. Clinical departments use this data at Beverly Hospital to develop indicators for review. An analysis of our FY 1990 Medicare experience shows, as expected, that the population that expired was, on average, older (79 vs. 74.3 years), sicker (2.54 admission severity vs. 1.34) and thus required more resources.

To summarize, Beverly Hospital continues to maintain a strong effort in the area of quality review and improvement. Peer review of all mortalities to ensure the delivery of appropriate and timely care remains an important part of our quality assurance program. Once again, we appreciate the opportunity to review and respond to HCFA mortality information. If there are any questions, please do not hesitate to contact me.

Very truly yours,



Robert R. Fanning, Jr.  
President

pc: Herbert Bistrong, M.D.  
Medical Staff President





BRIGHAM  
AND  
WOMEN'S  
HOSPITAL

H. Richard Nesson, M.D.  
President

75 Francis Street  
Boston, Massachusetts 02115  
(617) 732-5503

March 17, 1992

Gail R. Wilensky, Ph.D.  
Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, MD 21207-5187  
Attn: Robert Moore

Dear Dr. Wilensky:

Brigham and Women's Hospital (BWH) appreciates the opportunity to comment on the Medicare mortality data released by the Health Care Financing Administration (HCFA). We believe that the availability of data on hospital mortality experiences can be an important first step in determining how quality of care should best be measured.

We were pleased to learn that the observed mortality rates for "all causes" for BWH were at least two standard deviations below the predicted rates for all time periods in FY90, FY89, and FY88. Given that the BWH Medicare case-mix index was the second highest in Massachusetts and the twenty-eighth highest nationwide in FY90, we believe that this testifies to the high quality of the medical care we provide. In each of the disease groups measured in FY90, the BWH observed mortality rates were never more than one standard deviation above the predicted rates. In fact, for congestive heart failure, pneumonia/influenza, and stroke, the BWH observed rates were more than one standard deviations below the predicted rates for most of the FY90 time periods measured.



A Teaching Affiliate of Harvard Medical School

- 2 -

It should be emphasized that the release of the HCFA mortality data augments existing quality management activities at BWH. As part of our own on-going commitment to ensuring the quality of patient care, we routinely review every death that occurs within our hospital. These data are used in conjunction with other indices to guide departmental peer reviews and the resulting corrective actions taken. Such findings and actions are reported on a regular basis, and monitored by the Clinical Chiefs of Staff, Medical Staff Quality Assurance Committee, Medical Staff Executive Committee, and Patient Care Assessment Committee of the Hospital Board of Trustees. In addition, we are conducting an active internal research program to develop more sensitive standards of outcome than mortality rates.

Sincerely,

A handwritten signature in cursive script, reading "H. Richard Nesson". The signature is written in dark ink and is positioned above the printed name.

H. Richard Nesson, M.D.

HRN/mle

# BH Burbank Hospital

The Picture of Health

March 16, 1992

Gail R. Wilensky, Ph.D, Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland, 21207-5187  
ATTN: Robert Moore

Medicare Provider Number 220001

Dear Ms. Wilensky:

The following comments are submitted in response to HCFA's FY 1990 Medicare Hospital Mortality Information on Burbank Hospital.

HCFA's continuing efforts to improve the accuracy and usefulness of its mortality reports are appreciated.

As in the past, Burbank Hospital officials carefully reviewed the data and are pleased to note only one statistically significant difference above the .25 level in mortality rates in any of the categories. In this category, hip fractures, patients at Burbank Hospital who died within 90 days of admission had an average age of 87.3 years and a number of other serious conditions which complicated the course of their illness. A review of all of these cases revealed the care to have been appropriate and the deaths unavoidable. The other results corroborate positive findings from the Hospital's own comprehensive quality assurance program. Nevertheless, all deaths were reviewed in any category with a mortality rate above the norm even when there was only 1 death in that category. By using MedisGroups, a system which adjusts for severity of illness at admission and compares these outcomes to a national data base, we found that, in most instances, an increase in mortality coincided with an increase in severity of illness at admission. This finding is supported by a study recently published in the Journal of the American Medical Association which found that most differences in hospital mortality are the result of very large differences in the conditions of the patients coming in.

It should be noted that Burbank Hospital serves as a regional referral center for oncology, gerontology, dialysis and emergency medicine patients. These patients may well be more severely ill at admission.

275 Nichols Road  
Fitchburg, Massachusetts 01420-8209  
508-343-5000



March 16, 1991  
Medicare Provider Number 220001


page 2

The following corrections to the Hospital characteristics printed by HCFA should also be noted:

- In-patient care is provided to terminally-ill patients enrolled in a hospice program affiliated with Burbank Hospital.
- There are 6 Family Practice Residents.

Sincerely yours,

BURBANK HOSPITAL



William J. Williams  
President



CARDINAL CUSHING GENERAL HOSPITAL

235 NORTH PEARL STREET, BROCKTON, MASSACHUSETTS 02401

(508) 588-4000

Robert J. Jepsen, Jr.  
President

**220156-Medicare Provider Number**

March 17, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

Attention: Robert Moore

Dear Dr. Wilensky:

Cardinal Cushing General Hospital has reviewed the Fiscal Year 1990 Medicare Hospital Mortality Rates and offers several general comments to public consumers of the statistical summary of this report.

The Hospital fully acknowledges the scope and magnitude of this national project, and views the results of the study as one of many valuable tools the Hospital engages in its continuous monitoring of quality care.

The Hospital falls within the predicted ranges for all disease categories in this analysis. However, the Hospital cautions that the report can be interpreted as measuring a patient's likelihood of mortality due to any of a number of causes following discharge from the hospital. Patients, in this report, are grouped in categories on the basis of their discharge diagnoses, which may not have a relationship to their subsequent cause of death.

We look forward to future endeavors in this regard and encourage any party with questions or seeking additional information to call the Hospital.

Sincerely,

  
Robert J. Jepsen, Jr.  
President

RJJ:emc



Caritas Christi - A Catholic Health Care System - Charter Member

An Affiliated Teaching Hospital of Tufts University School of Medicine

Old Road to Nine Acre Corner  
Concord, MA 01742-4166  
(508) 369-1400

Medicare Provider #220084

March 19, 1992

Gail R. Wilensky, Ph.D. Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12 Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

ATTN: Robert Moore

Dear Mr. Moore:

For more than 80 years, Emerson Hospital has strived to deliver quality, personalized care to every patient. Consistent with our mission, Emerson has in place a longstanding quality assessment program designed to continually assess patient care and take actions for improvement. Moreover, we recently established a Continuous Quality Improvement Committee designed to educate our Board of Directors, managers and department heads, and every hospital employee about our strong commitment to total quality management, a systems analysis approach to solving problems. Consequently, we employ many different means to assess the quality of patient care, including the annual review of HCFA mortality data.

Based on our preliminary review of the mortality data for Medicare patients discharged from Emerson Hospital between October 1, 1989 and September 30, 1990, the information forwarded to us by HCFA appears accurate. Should subsequent analysis reveal any errors in the data, we will inform your agency.

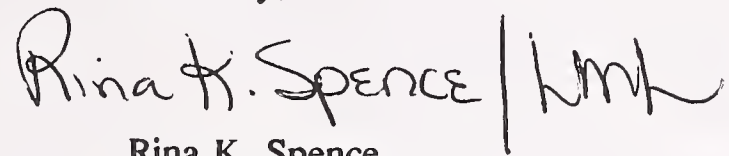
We are pleased, of course, that the overall mortality rates for FY1990 for Emerson Hospital are within the predicted range. We applaud HCFA's continuing effort to refine its measurement of mortality data so that it can become a more effective tool to assist hospitals in monitoring care. At the same time, we realize that the measurement of mortality data itself is a highly complex issue and one that is often difficult for both clinicians and the public to interpret.



Page Two

Finally, since HCFA and hospitals share the goal of improved patient care, we would encourage a broad educational effort to help the health care consumer understand not only this mortality data but all of the components used to assess and measure quality care in a hospital setting.

Sincerely,

A handwritten signature in black ink that reads "Rina K. Spence" followed by a vertical line and a stylized monogram or initials.

Rina K. Spence  
President and CEO

RKS:jr/.40

March 19, 1992



FAULKNER  
HOSPITAL

Gail R Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore

Dear Dr. Wilensky:

Below please find our comments relative to the annual release of the "Medicare Hospital Information Report" (i.e. FY 1990 mortality data). In addition, we've provided an "Error/Correction Report" separate from this comment section so that corrections may be made to data found to be erroneous.

COMMENTS

We, now for the fifth consecutive year, have been in receipt of the HCFA mortality data. Once again Faulkner Hospital enthusiastically welcomed this opportunity to further assess the quality of services we provide. This was accomplished through an extensive and intensive systematic process to determine if any trends, problems or issues exist. We approached this process as thoroughly and objectively today as we have now four times previously, (i.e. since the onset of the distribution of this data) and as we approach all our review processes, i.e with a goal of continuously seeking opportunities to improve patient care.

Subsequent to an initial screening to assess both the accuracy and integrity of the provided data, an extremely indepth review was conducted on 100% of those patients who expired within 30 days of admission. In addition, an equally intensive review was completed for a representative sample of patients who expired beyond the 30 day period. These reviews were performed with an intent to identify quality issues/concerns or merely identify suspicions of such. It is significant to point out that this process was independent of the internal review processes that exist at Faulkner and are carried out every day on all patients, though indeed these and similar cases would have been subjected to an aggressive, concurrent assessment that considers all aspects of patient care. Though the results of our review revealed no significant problems or trends, it did reveal again and again a level of excellence in patient care and services that is indeed a source of our institutional pride.

In order to further assess the HCFA data, we compared the reviewed cases with the results of the same cases that had undergone MassPRO review. We were most gratified to note that the findings from the PRO reviews, which comprise a fairly large and representative sample of the Medicare population and are problem focused in their selection (after initial nurse review), resulted in no cases having a final determination that a quality issue existed.

617-522-5800

Allandale at Centre Street, Boston, MA 02130



Though HCFA has indicated that the methodology used in the mortality analysis has "improved each year" once again, as has been our stance now four times previously, we are reminded that the HCFA methodology continues to lack a severity component. Though this of course precludes the data from being used as a true measurement of quality, we can and do utilize the data, as noted previously, as yet another tool for screening and monitoring all aspects of patient care.


With regard to the "general overview of mortality information" that was provided in the 2/28/92 HCFA communication, it is stated that the methodology provides for observed and predicted mortality rates at 30, 90, and 180 days following the selected admission, "as with this approach, information about the early and later results of the hospitalization are provided." Since prior or subsequent admissions or outcomes may or may not be associated with the reason for hospitalization for the selected admission, and indeed information regarding intervening care is not considered in any way and in particular in terms of severity, intensity and setting, nor are external (non-medical) circumstances considered, the presumption or conclusion that a correlation exists between the hospitalization and "later results" is surely misleading. Since your cover letter indicated that "such information is also an important step in helping beneficiaries make more informed health care decisions", the publication and release of this information clearly should delineate the limitations of the HCFA methodology.

At Faulkner our Quality Assurance process, which endeavors to assure the highest quality patient care, has been in existence for many years. Since its inception, this process has continuously evolved both in breadth and scope to concurrently and extensively monitor the quality of services provided. This is accomplished through an objective, planned and systematic process that is comprised of the review of services and staff (who provide the services) at all levels.

Since Faulkner's mission focuses on excellence in patient services, it is with great pride that our hospital-wide quality approach is spearheaded by a distinctive medical staff peer review committee and a highly skilled Quality Assurance staff, who continuously seek opportunities to improve patient care. Reviews encompass all clinical areas and are structured to routinely assess the care and services provided to 100% of our admissions. Application of a vast number of indicators of care including criteria based on current standards of care are utilized to flag cases that may require a more intensive review. Expert medical staff analysis is an integral part of this review process.

Indeed all of us at Faulkner take great pride in our hospital-wide commitment to quality which is evident not only from the Governing Body, Medical Staff, Management Team, and Nursing Staff, but it is also quite apparent in all other departments and areas both directly and indirectly involved in patient care.

Sincerely,

  
Elaine S. Ullian  
President

Enclosure





# Henry Heywood Memorial Hospital

## *HCFA Medicare Hospital Information*

Medicare Provider #: 220095

Page 1 of 2

Although our observed rates fall within the predicted ranges for all cases and all categories, we continue to have concerns about the reliability and usage of this data.

Quality and appropriateness of care can only be reliably determined through the review of patient records, an extensive process undertaken routinely in the context of the Hospital's own Quality Assurance program and through the Medicare Peer Review Organization (PRO).

While we applaud HCFA's attempt to provide hospitals and consumers with meaningful outcome-related information on the treatment and care of selected Medicare patients, these attempts to date have tended to raise more questions than they answer.

### **Questions raised include:**

- EXTERNAL FACTORS are not considered in the data such as demographics (beyond sex and age) and socioeconomics, availability and effectiveness of primary, pre-hospital and post-hospital care, prevalence of lifestyle risk factors and patient compliance with prescribed treatments.
- CODING VARIANCES may continue to occur between hospitals in the process of assigning DRG Codes.
- PRACTICE PATTERN VARIATIONS render such global comparisons problematic at best. Acute care admissions of terminally-ill patients or transfers of such patients from skilled nursing facilities can strongly impact on mortality data. Because admissions through the ER are not categorized as to place of origin, many if not all skilled nursing home transfers are not identified as such in Medicare data.



---

# Henry Heywood Memorial Hospital

Medicare Provider #: 220095

Page 2 of 2

## Overall--

Observed mortality rates for Henry Heywood Memorial Hospital fall within the predicted ranges for all cases and all diagnoses. Most importantly, we have confidence in the mechanisms in place at Heywood Hospital and through such external agencies as the PRO to assure that we are providing appropriate and high quality care.

HOLY FAMILY HOSPITAL AND MEDICAL CENTER RESPONSE  
TO THE HCFA SELECTED MORTALITY INFORMATION  
FOR FISCAL YEAR 1990  
Date Submitted - March 18, 1992

In the interests of the hospital's commitment to quality care, Holy Family Hospital and its medical staff leadership have reviewed the HCFA mortality rate data. Holy Family Hospital's mortality rates for the diagnostic categories studied fell within the predicted ranges (adjusted for standard deviation) as developed by HCFA. This fact is supported by an independent analysis of the data Holy Family Hospital commissioned from Hospcosts Forecasts Associates, Boston, Massachusetts -- a company with a recognized expertise in statistical forecasting. Its report, authorized by James R. Diggins, Ph.D., President, states in part --

..."There is absolutely no doubt whatsoever that Holy Family passes every statistical test that Medicare had enough data to calculate. This conclusion is unambiguous and uncontestable"...

The report, after evaluating all of the data points covered in HCFA's study, goes on to conclude:

..."All this means is that statistically, none of the differences between Holy Family's mortality rates and those predicted by the HCFA model are large enough to be meaningful"...the conclusion is that Holy Family mortality rates are the same as Medicare says they should be"...

Due to the very brief time this mortality information has been available to the hospital and also to the unremarkable nature of the findings as reviewed by our consultant statistical forecaster, we have not done any specific studies on either the patients listed in this material or within the categories of diagnosis reviewed. We have done this in the past, however, and have never documented any evidence of inappropriate care or of medical mismanagement. It should also be pointed out that last year we did study extensively the category "hip replacement/reconstruction" and concluded that patients displayed in this category, at least as far as this hospital is concerned, are not hip replacement patients at all, but rather that they have suffered sudden and traumatic hip fracture necessitating the placement of an "Austin-Moore prosthesis." This procedure is not considered to constitute either "hip replacement" or "hip reconstruction." This procedure should, more appropriately, be considered in a new study category "open treatment of hip fracture."

Additionally, it should be noted that the HCFA study does not address severity of illness within any of the diagnostic categories or procedures reported. With this in mind, it must be further stated that Holy Family Hospital serves as a regional cancer referral center and admits the more acutely ill patient from other hospitals for both diagnostic and acute care management services. In addition, and due to the same circumstances, Holy Family Hospital treats a higher incidence of the more at-risk neurologic and neurosurgical patients than most comparable community hospitals. Also, for deaths in most categories, there are many cases where patients and/or their families requested no further heroic measures be taken.



-2-

The HCFA data categories are based on the principal diagnosis (condition after study found to be the chief reason necessitating admission) and do not necessarily reflect the actual cause of death. For instance, patients whose cause of death is cancer are often admitted with a condition in another diagnostic category.

Holy Family Hospital has an active Quality Improvement, Assessment and Risk Management program which represents the best clinical interests of all patients regardless of age. The Quality Improvement, Assessment and Risk Management program, under the direction of the medical staff, encompasses a multi-disciplinary team approach. The stated purpose of the Quality Improvement, Assessment and Risk Management program is:


To create a coordinated and integrated Quality Improvement, Assessment and Risk Management program designed to use staff time and resources appropriately; to enhance patient care through the ongoing assessment of important aspects of patient care; to create a cost-effective program; and to correctly identify problems in all areas of management. This program evolves in part from the hospital's long-standing mission to provide well-coordinated, cost-effective, comprehensive services to the communities it serves with a special commitment to addressing the needs of the elderly and terminally ill.

As part of the hospital's Quality Improvement, Assessment and Risk Management effort, the medical staff reviews all mortalities for educational purposes and to document and substantiate the appropriateness of care and clinical patient care management in all cases. Similarly, the Quality Improvement, Assessment and Risk Management program identifies and monitors all other aspects of patient care in hospital management in an effort to continually improve the quality of patient care services within the hospital. These Quality Improvement, Assessment and Risk Management activities have been standard practice at Holy Family Hospital for many years prior to government mandates in this area.

The Massachusetts Peer Review Organization, empowered by the Federal Government to review care and management of Medicare patients, has not identified any instances of quality care issues affecting the overall care of those patients identified in the HCFA mortality report. Holy Family Hospital also adheres to the regulations of the Massachusetts Board of Registration in Medicine Patient Care Assessment Program. Neither the hospital medical staff, its Quality Improvement, Assessment and Risk Management program, nor the Massachusetts Peer Review Organization have identified any quality care issues that affected patient care during 1990.

Holy Family Hospital strives to provide the highest level of care for all patients. It has reviewed the HCFA data and prepared this response to assure we are meeting our own standards of quality care.

Please also note that the "Hospital Characteristics" section of the HCFA report on Holy Family Hospital identifies the hospital's case mix index for 1990 as 1.1509. The actual Medicare case mix index for Holy Family Hospital during the fiscal year studied was 1.2102.

  
William L. Lane  
President/Chief Executive Officer



**HUBBARD REGIONAL HOSPITAL**

340 Thompson Road  
Webster, Mass. 01570

Telephone (508) 943-2600

Provider No. 220025

March 11, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

Attention: Robert Moore

Dear Mr. Moore:

In response to the HHS Letter dated February 28, 1992, I would like to report that the Quality Assessment Committee of Hubbard Regional Hospital did review the HCFA mortality information for 1990. Unfortunately, the number of cases in each diagnostic category was too small to permit a satisfactory estimation of the standard deviation.

As mentioned in previous correspondence, this information on its own is not a complete measure of the quality of care at an individual hospital. Hubbard Regional Hospital remains committed to an ongoing Quality Assessment Program which is designed to objectively and systematically monitor and evaluate the quality and appropriateness of care rendered to each patient. Both clinical and administrative staffs monitor and evaluate the quality of patient care and clinical performance and further resolve identified problems. This information is reported to the governing body to assist it in fulfilling its responsibility for the quality of patient care.

Hubbard Regional Hospital will continue to provide the best possible care that is achievable to all of its patients.

Sincerely,

Edward F. Kittredge  
Administrator

cc Joann Edmonds  
Joanne Newton

jbn



Carl F. Sundstrom II, Chairman  
Peter A. Chapman, President

March 18, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, MD 21207-5187

ATTN: Robert Moore

RE: HOSPITAL I.D. #220060

We have reviewed the Medicare hospital information regarding Jordan Hospital, Inc., and find discrepancies in the Hospital Characteristics section from the AHA 1990 Annual Survey. The following items are in error:

|                                              | INCORRECT<br>INFORMATION<br>AS PRINTED | CORRECT<br>INFORMATION |
|----------------------------------------------|----------------------------------------|------------------------|
| Occupancy Rate                               | 73.0%                                  | 73.8%                  |
| SPECIALTY SERVICES:                          |                                        |                        |
| Hospice Care                                 | NO                                     | YES                    |
| OTHER SPECIALTY/<br>HOSPITAL-BASED SERVICES: |                                        |                        |
| Rehabilitation                               | NO                                     | YES                    |
| Psychiatric                                  | NO                                     | YES                    |

A copy of page 77 with these corrections indicated is attached. Thank you for your assistance with this matter.

Sincerely,

A handwritten signature in cursive script, appearing to read "Peter A. Chapman".

Peter A. Chapman  
President

PAC:jd

attachment

cc: Susan Marre, RRA, Director of Medical Records





March 16, 1992

Hospital ID #220094

Ms. Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management & Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
Attn: Robert Moore

Dear Ms. Wilensky:

Thank you for your recent submission of HCFA mortality data to Leominster Hospital. As you know, we believe that mortality information may be useful for clinicians and administrators of health care institutions for screening purposes to help analyze the quality and appropriateness of the services they provide. Accordingly, and as in the past, we will forward this information, along with other useful indicators, to our Medical Quality Review Committee for its assessment.

Sincerely,

Beverly Gorvine  
Executive Vice President & C.O.O.

BG/rmc

FILE: HCFA.BD



**Ludlow  
Hospital**

MEDICARE PROVIDER  
NUMBER 220099

March 19, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

ATTN: Robert Moore

Ludlow Hospital is submitting the following comments which should be taken into consideration while reviewing the Medicare Hospital Information - 1992 Report.

Cases with observed greater than expected mortality incidences or increased mortality incidences compared to 1988 and 1989 were reviewed.

The condition/procedures reviewed were: Acute MI; Stroke; Sepsis; Initial Pacemaker Insertion; and C.H.F.

Of 39 cases reviewed:

- \*27 patients were 75 years or older
- \*12 patients less than 75 years old
- \*4 had cardiac arrest prior to arrival
- \*11 cases did not die in this hospital
- \*7 cases died outside 180 day parameter

The breakdown by specific condition/procedure category:

C1-Acute MI (12 cases)

- \*3 did not die at this hospital, unknown cause of death
- \*4 had cardiac arrest prior to arrival
- \*3 had comorbid cardiovascular disease
- \*2 had undergone recent bypass surgery
- \*age range was 68-92

C6-Stroke (7 cases)

- \*2 did not die at this hospital, unknown cause of death
- \*1 died 2 months after stroke; cause of death sepsis with coma
- \*2 had comorbid pneumonia and cardiovascular disease
- \*age range was 70-89

C8-Sepsis (4 cases)

- \*2 did not die at this hospital, unknown cause of death; - 1 of these was beyond 180-day parameter
- \*1 was not proven septic by diagnostic tests
- \*1 had comorbid renal failure, respiratory failure, electro-lyte imbalance
- \*age range was 83-101

C2-CHF (14 cases)

- \*4 did not die at this hospital, unknown cause of death, except 1 who was transferred to another hospital with tubular necrosis, acute renal failure
- \*6 died more than 180 days after admission
- \*4 refused intubation, were DNR status per patient/family request
- \*age range was 60-92

P3-Initial Pacemaker Insertion (2 cases)

- \*1 had cardiac arrest prior to arrival
- \*1 had comorbid cardiogenic shock
- \*ages 78 and 86

Insofar as this hospital has determined significant errors in the report based on a small sample of only 39 cases compared to the more than 500 patients submitted, we respectfully request a re-review of the data.

The Hospital appreciates this opportunity to include this addendum to the report.

Sincerely,

*James V. Divver*

James V. Divver  
Chief Executive Officer





# MARLBOROUGH HOSPITAL

57 Union St., Marlborough, MA 01752  
(508) 481-5000 • Fax (508) 485-9123

March 18, 1992

Gail R. Wilensky, Ph.D. Administrator  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, MD 21207

Attn: Robert Moore

Dear Mr. Moore:

The H.C.F.A. Medicare Mortality Data represents 1195 Medicare patients discharged from Marlborough Hospital between October 1, 1989 and September 30, 1990. However, many were discharged more than once within this time frame.

Numerous factors affecting these statistics were not utilized in calculating the findings. Therefore I think it is important to identify the factors that are not represented in determining the H.C.F.A. statistics. For example, they do not reveal whether the patients or their representatives in these instances requested life sustaining measures not be initiated. The severity level of the patient's illness is not measured, nor are social or cultural factors represented in your results. Also lacking is the individual patient's level of compliance with medical intervention or indications of whether there were unrelated events, such as motor vehicle accidents which contributed to the patient's demise.

As stated by H.C.F.A., "The precision and interpretability of our estimates are questionable when there are no deaths or 50 or fewer cases in a particular category being analyzed." For Marlborough Hospital 14 of the 17 categories for which your statistics were compiled contain fewer than 50 cases. Clearly then, the "precision and interpretability" of these statistics is very limited for our institution.

Of the 14 patients in the category of stroke, 12 patients or their representatives had requested life sustaining measures not be initiated; the average age of the 14 patients was 81. All of the patients included in this category had multiple comorbid conditions such as metastatic cancer, renal failure, chronic obstructive lung disease and insulin dependent diabetes which contributed to their demise. The category chosen (stroke) does not reflect the actual

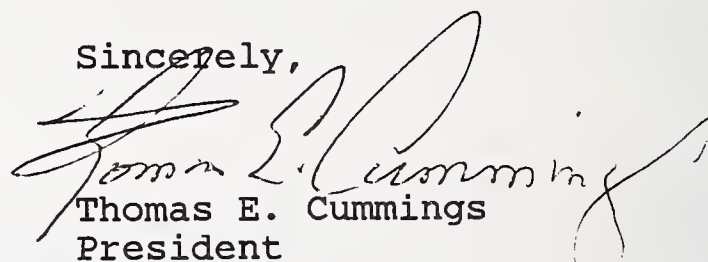
cause of death documented in the medical record by the attending physician. Three of the patients were discharged to other facilities and the details of their subsequent course are unknown. Eight of the patients had a hospital length of stay under 5 days indicating a high severity.

Relative to the patients in the category of congestive heart failure, in two of the sub-groups (60 and 180 days) the hospital mortality rate was below what was predicted. For the sub-group of 30 days the hospital's mortality was slightly higher. This may reflect the fact that 5 of these patients were in the hospital 2 weeks or longer, suggesting chronic, severe disease not responding to intensive intervention. Cormorbid conditions within this group include several previous myocardial infarctions, metastatic cancer and severe cardiac disease.

It is our belief that statistical death rates do not confirm or deny the quality of patient care management. They should be used to identify areas requiring more indepth review. The only accurate measurement of patient care management is derived through individual clinical review. H.C.F.A. also believes that the Mortality Rate Data is only a single preliminary step in the process of measuring the quality of health care. In keeping with this belief, Marlborough Hospital has had a comprehensive peer review system in place for several years and mortality review is one of multiple elements in this process. The availability of the H.C.F.A. data regarding deaths subsequent to discharge is a useful addition to our mortality review systems.

Marlborough Hospital supports all efforts to produce indicators that assist health care providers in monitoring and evaluating patient care management. The Marlborough Hospital Board of Directors, Medical Staff, Administration, and employees remain committed to providing high quality care to all members of the communities we serve and who access our services.

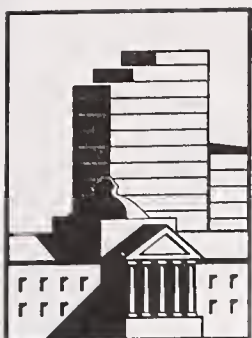
Sincerely,



Thomas E. Cummings  
President

TEC/mm





# MASSACHUSETTS GENERAL HOSPITAL

Boston, Massachusetts 02114

March 16, 1992

Medicare Provider #220071

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Bldg.  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

Attn: Robert Moore

Dear Dr. Wilensky:

The following comments pertain to the Medicare Hospital Information - 1992, "HOSPITAL CHARACTERISTICS" section on page 105.

Under subheading "Profile", the Case Mix Index (CMI) of 1.7669 does not reflect the actual 1990 year end total. It should be 1.7725.

Under subheading "Staffing", 'the Percent of Physicians Board Certified Specialists' should read "estimated 94.0%"

Under subheading "Specialty Services" - 'Other Intensive Care' should be Yes.

Under subheading "Other Specialty/Hospital Based Services", - 'Psychiatric' should also be Yes.

Sincerely,

J. Robert Buchanan  
General Director  
Massachusetts General Hospital

enc.



# NORTH ADAMS REGIONAL HOSPITAL



A Community Hospital Committed to Excellence

Medicare Provider #-220051

Hospital Avenue, North Adams, Massachusetts 01247

Patrick L. Muldoon  
President

March 16, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Bldg.  
6325 Security Boulevard  
Baltimore, MD 21207-5187

Dear Ms. Wilensky:

We appreciate the opportunity to include our comments in the upcoming HCFA publication of hospital mortality rates.

The Medical Staff and Administration of North Adams Regional Hospital, as part of its ongoing quality assurance and peer review activities, reviews the care of every patient who dies within our hospital or in the Emergency Department. This commitment predates HCFA's current attempt to apply external quality control measures to our institution and will continue as part of the important role of quality monitoring in our institutional setting.

While the provision of this information is useful data to hospitals in the continuous search for improvement, it is important that the public realize the inherent danger of using one statistical data element alone to draw conclusions about the quality of care at any institution. Specifically:

1. The HCFA data for North Adams Regional Hospital represents a very small mortality incidence in real numbers over a short time frame, one year. Statistical techniques tend to be reduced in validity when numbers are small and timeframes are short, as in the case of the NARH data. Consequently, we suggest caution based upon sample size.
2. The data includes deaths which occurred within 180 days of admission to a hospital. Given North Adams Regional Hospital's Medicare average length of stay of under 8 days, the data on average accounts for deaths for 6 months after discharge. These deaths may or may not be related to admission.

Ms. Gail R. Wilensky, Ph.D.  
Administrator  
Health Care Financing Administration  
March 16, 1992

Page 2

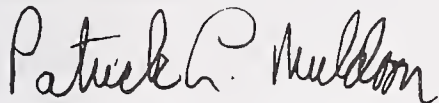
3. The data does not adjust for case mix; i.e., hospitals which serve a large population of elderly or poor or high risk individuals may experience a higher mortality rate not due to poor care, but instead due to the patients that they treat. North Adams Regional Hospital, for example, services a population which is significantly older than the nation as a whole.

North Adams Regional Hospital and its Medical Staff, like all responsible health care institutions, welcome additional information which helps the important work of monitoring quality. However, the publication of one data element, mortality rates, out of the hundreds of indicators reviewed in a hospital every day, can legitimately be used only to raise questions which should then be answered through further study.

We at North Adams Regional Hospital intend to include the HCFA mortality statistics into our overall quality improvement system as a part of our ongoing review process.

Thank you for the opportunity to share our views.

Sincerely,



Patrick L. Muldoon, President  
North Adams Regional Hospital





## Norwood Hospital

800 Washington Street  
Norwood, Massachusetts 02062  
Telephone (617) 769-4000

TO: Gail R. Wilensky, PhD. March 16, 1992  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

ATTN: Robert Moore

FROM: Jeannè Morello, FACHE  
Executive Vice President, Operations  
Norwood Hospital  
800 Washington Street  
Norwood, Massachusetts 02062  
Provider # 220126

RE: COMMENTS ON THE HCFA 1990 MORTALITY DATA

The hospital has reviewed the contents of the HCFA report regarding fiscal year 1990 mortality data. As expected, the observed rate for all causes of death was below the predicted rate for the 30 days, 90 days, and 180 days groupings. In all categories, the results showed a decrease from previous years in the variations between the observed and the predicted rate. This confirms the results of the medical staff's on-going monitoring and assessment of all deaths.

Representatives of the medical staff and quality assessment staff evaluated patients records in the acute myocardial infarction category to determine the validity of the information. As in prior years, the majority of the patients were found to have serious diseases which severely compromised their ability to withstand an acute illness. Patients were found to have comorbid conditions such as coronary artery by-pass surgery, left-heart ventricular perforation, cancer, acute pancreatitis, congestive heart failure, cerebral vascular accident, renal failure, diabetes, and hypertension. Six (6) of the 24 patients in the 30 days grouping were admitted to the hospital in cardiac arrest and died within 24 hours. There was no quality of care issue noted in the review of these records.

The hospital continuously monitors and evaluates the quality of care delivered to patients. This process, which includes peer review of the medical staff and hospital staff, follows the standards of the Joint Commission on Accreditation of Healthcare Organizations and meets the objectives of the hospital's Quality Assessment/Improvement and Risk Management Plan. Norwood Hospital is dedicated to providing the highest quality of patient care possible. This is its primary mission and the hospital is confident that this standard is being upheld on a daily basis.




Quincy Hospital

114 Whitwell Street  
Quincy, Massachusetts  
02169

(617) 773-6100  
FAX: (617) 479-5812

March 19, 1992



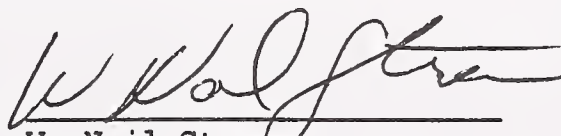
Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore

Medicare Provider #220067

Dear Ms. Wilensky:

Quincy Hospital has reviewed the 1990 Medicare Hospital Mortality Rate Statistics recently provided. We appreciate this information, but we would like to state for the record that we believe that this is but one of the many quality indicators which Quincy Hospital reviews and that mortality data alone is not indicative of the quality of care provided at a hospital. That said, Quincy Hospital was pleased to note that we are within one standard deviation of all of the indicators and that in a majority of the indicators, we are below the predicted rate. We will, as we have in past years, do a more exhaustive study of this data as part of our ongoing quality assurance program. We would like to thank you for providing us with this data as it is useful in our efforts to continually improve the quality of care provided to all patients at Quincy Hospital.

Sincerely,



W. Neil Stroman  
Chief Operating Officer

/dw



# THE COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF HEALTH AND HUMAN SERVICES

SOLDIERS' HOME IN HOLYOKE

110 CHERRY STREET  
HOLYOKE, MA 01040

(413) 532-9475

WILLIAM F. WELD  
GOVERNOR

DAVID P. FORSBERG  
SECRETARY

RUDY J. CHMURA  
SUPERINTENDENT

March 18, 1992

Medicare Provider # 220153

Gail R. Wilensky, PhD, Administrator  
Health Care Finance Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore

Dear Ms. Wilensky:

The Soldiers' Home in Holyoke wishes to acknowledge the receipt of FY 1990 Medicare Hospital Mortality Rates.

The Soldiers' Home in Holyoke is a State Veterans facility and was established in 1952, consisting of 259 Long Term Care beds, a 27-bed Hospital Unit, and a 50-bed Dormiciliary Unit.

The purpose of the Soldiers' Home in Holyoke is to provide the highest quality of patient care that is optimal within achievable resources. The Soldiers' Home in Holyoke is an accredited facility by the JCAHO, in both the Long Term Care and Hospital section.

The Soldiers' Home in Holyoke, Hospital Unit provides medical care to Veterans who are transferred from the Long Term Care units of the Soldiers' Home facility. The average age of these Veterans is 75.7 years. Their general health is usually compromised from chronic illness such as chronic cardiovascular diseases, cerebrovascular degeneration and chronic pulmonary diseases. Therefore, their length of stay is longer than the predicted rate.

The Soldiers' Home in Holyoke maintains a comprehensive integrated Quality Improvement Program that evaluates in a systematic, ongoing manner the quality and appropriateness of patient care rendered, by all health care professionals in all clinical department and support care areas.

In conjunction with the Quality Improvement Program, the Soldiers' Home in Holyoke participates in a Patient Care Assessment Program mandated by the Medical Malpractice Act of 1986, Chapter 35, Massachusetts General Laws, enforced by the

Continued, Page 2,

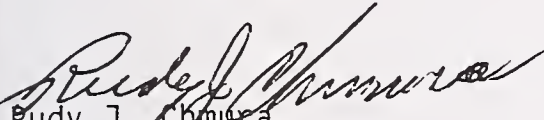
Medicare Provider # 220153

Massachusetts Board of Registration in Medicine.

The Soldiers' Home in Holyoke is proud of the available facilities to the Veterans of Massachusetts. Our dedicated staff of physicians, nurses and administrative personnel have one goal - to provide the best services possible to Veterans of all wars. We will continue to strive to provide the highest degree of quality care to all of our patients.

Thank you for allowing us this opportunity to respond.

Very truly yours,



Rudy J. Chmura  
Superintendent  
Soldiers' Home in Holyoke

RJC:d





**South Shore  
Hospital**

55 Fogg Road  
South Weymouth  
Massachusetts  
02190-2455

(617) 340-8000

David T. Hannan  
President

**Medicare Provider #220100**

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Bldg.  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

Attn: Robert Moore

Dear Mr. Moore:

Following are South Shore Hospital's comments to the Medicare Hospital Information Report:

Regarding this year's mortality data release, we find that South Shore Hospital's actual mortality experience in total and in all of the categories for the three years examined is within predictable limits. In view of the institution's high patient acuity experience, these findings are noteworthy.

South Shore Hospital is a private, not-for-profit, regional acute care medical center. It is licensed to operate 342 beds (249 medical/surgical, 32 intensive care/coronary care, 32 obstetric and 29 pediatric/young adult) and 8 Level II newborn bassinets and 36 well-baby bassinets. In 1991, the hospital opened new centers for emergency and maternity care to respond to the demand for those services. The hospital provides a broad range of inpatient services and is the premier health care provider in southeastern Massachusetts. The hospital's 350 physicians and allied health practitioners represent virtually every major medical specialty. Ninety percent of physicians are board certified. The medical/surgical occupancy rate is 85 percent, making South Shore one of the most actively utilized hospitals in the Commonwealth.

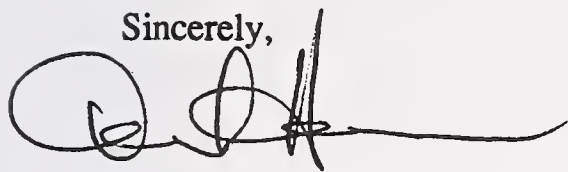
Our commitment to delivering quality patient care is evidenced by a strong hospital-wide quality improvement program involving physicians, nurses and other patient care professionals from all clinical and non-clinical areas. With the help of a full-time quality improvement professional staff, the quality and continuity of care and services provided to all of our patients is continually monitored against explicit practice standards developed by members of the medical staff and other clinical professionals at the hospital. These practice standards are routinely and regularly reviewed for appropriateness.

We appreciate that HCFA has attempted to respond to hospitals' concerns regarding statistical methodologies and presentation of the data, and has refined them further this year to make the data as meaningful as possible. We particularly appreciate HCFA's addition this year of data over a 180-day time frame to allow examination of other factors in the health care delivery system that can affect outcome. We specifically recommended such a move in our comments to last year's report. However, the need continues to refine still further the methodology to incorporate patient-specific variables that affect outcome and explain the variance in mortality among hospitals.

Despite the latest adjustments to HCFA's model, health care consumers still should interpret these data with caution and may find the information valuable only when supported by more complete assessment of individual case outcomes. The quality improvement program at South Shore Hospital meets this responsibility for all patients including Medicare patients. An ongoing hospital quality improvement program, supported by administration and the medical staff, remains the only valid method of assessing the quality of medical care provided to our patients. The HCFA mortality data will be reviewed by the hospital's quality improvement committee, as has been done in previous years.

South Shore Hospital appreciates the opportunity to comment on this material. We encourage health care consumers to make informed decisions based on accurate, reliable and complete information. Quality health care is a mutual goal for both consumers and providers.

Sincerely,

A handwritten signature in black ink, appearing to read 'David T. Hannan', with a long horizontal flourish extending to the right.

**David T. Hannan**  
President/CEO  
South Shore Hospital  
South Shore Health and Educational Corporation





**Southwood  
Community Hospital**

111 Dedham Street  
Norfolk, Massachusetts 02056  
Telephone (508) 668-0385

March 16, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

ATTN: Robert Moore

Dear Sir:

We have reviewed the **Medicare Hospital Mortality Information** for **FY 1990** and appreciate this opportunity to offer our comments.

First, it should be noted that we had fewer than 50 deaths in each category, and thus, as mentioned in your General Overview of Mortality Information - Attachment A, the precision and interpretability of your estimates could be questionable.

However, we did look at specific cases listed in the report and in the case of the death attributed to Hip Fracture, found that the patient was admitted at a later date for an acute myocardial infarction and this was the cause of death. Under Procedures, we checked the two Initial Pacemaker Insertions and found that one patient, a 90 year old in congestive heart failure, previously had a stroke, and died four months later outside the hospital; the second patient had breast cancer with metastases to the lungs and bones, was discharged to a nursing home and died there. Likewise, one of the four patients under Sepsis died at a local nursing home eight months after discharge; another died of liver and kidney disease during a later hospitalization and a third patient was readmitted five months later with a stroke and developed aspiration pneumonia and expired.

We would also like to point out that 44 of the 101 deaths with a Principal Diagnosis not listed in any of the conditions or procedures in the report had a diagnosis of cancer or a treatment procedure for it.

We did find the data useful as indicators for further investigation and will share the information with facility peer review bodies as part of our comprehensive, ongoing quality assessment program to identify, investigate, and resolve patient problems.



Finally, we would like the public to know that Southwood Community Hospital is dedicated to the provision of the highest quality of care possible to all of the community. Our ongoing quality assessment, peer review, and risk management programs are second to none in the monitoring and evaluation of patient care services in accordance with the guidelines of the JCAHO, AMA, ANA, the Massachusetts Board of Registration in Medicine, and other review agencies. This is verified by the results of the most recent JCAHO survey when we were accredited with distinction.

Sincerely,

A handwritten signature in cursive script that reads "Yolanda C. Landrau". The signature is fluid and elegant, with a long, sweeping underline.

YOLANDA C. LANDRAU, Ed.D.  
Senior Vice President  
Patient Care Services/Behavioral Medicine

YCL:lr



Provider #: 220020

*St. Anne's Hospital, 795 Middle Street, Fall River, MA 02721-1798, (508) 674-5741*

March 16, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management & Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

Dear Dr. Wilensky:

Thank you for allowing St. Anne's Hospital to respond to H.C.F.A.'s release of mortality data for the fiscal year 1990. St. Anne's Hospital is an institution committed to both providing and monitoring quality of care and appreciates the H.C.F.A.'s efforts to make such information available to the consumers of health services. As in the past, however, I recommend that readers place the data into proper perspective with the knowledge that the data which is available to H.C.F.A. do not always allow for totally accurate measurement of patient characteristics which could have a large impact on the predicted mortality rate. Additionally, method of presentation of data may create wrong impressions. Illustrative of this, in this Hospital's report are areas where the observed rate exceeded the predicted rate. On the surface it would appear that these observed rates may be a cause for concern. However, in order to determine if this data was worthy of further investigation, this Hospital used the "SDs", or standard deviations, to calculate a 99% confidence level. Application of this formula revealed that St. Anne's Hospital was well within acceptable mortality limits in the areas in question.

This Hospital would also like to note that of the eighteen conditions/causes/procedures listed, there is data in five areas only where there are greater than fifty cases reviewed. In less than fifty cases it cannot be determined whether there is a difference between the observed rates and what would be expected for our Hospital.

In reference to the long term data: Long term mortality is difficult to interpret and raises the possibility that factors outside and beyond the control of the Hospital may have contributed to a person's death. This Hospital responds to the need for provision of services on discharge through its discharge planning staff. High risk screening is performed daily in order to immediately identify those patients who could potentially be in greatest need of continued care on discharge. To close the loop, patients requiring services are contacted shortly after discharge to assure

Gail R. Wilensky, Ph.D.  
March 16, 1992  
Page 2

Provider #: 220020

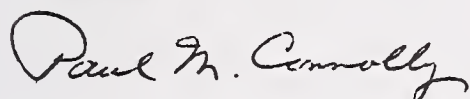
realization, timeliness, and satisfaction with services with intervention applied where necessary.

At this point, it is important to emphasize that the use of mortality does not, in itself, provide measure of quality but is instrumental in guiding quality assurance/improvement efforts. Our quality assurance staff reviews patient records on a daily basis using many criteria, including mortality, that reflect current professional standards of care that are in compliance with the Joint Commission on Accreditation of Health Care Organizations (J.C.A.H.O.), the Peer Review Organization (PRO) of the Massachusetts Medical Society, and other regulatory agencies. Additionally, our Medical Staff departments meet monthly to evaluate patient outcomes.

This rigorous mechanism of constant review and evaluation allows us to identify specific areas on which to focus more detailed review and to maintain the high standards of care that we constantly strive to achieve.

In closing, please allow me to again thank you for the opportunity to review and comment on our mortality data.

Sincerely,

A handwritten signature in cursive script that reads "Paul M. Connolly".

Paul M. Connolly  
Executive Vice President

PMC/ic



# St Elizabeth's Hospital

of Boston

---

736 Cambridge Street Boston, Massachusetts 02135 617/789-3000

Mar. 18, 1991

Gail R. Wilenski, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, MD 21207-5187  
ATTN: Robert Moore

Hospital I.D. No. 220036

Dear Dr. Wilenski,

As you requested in your letter of February 28, St. Elizabeth's Hospital is providing comments on the HCFA mortality data for FY 1990.

We are pleased to confirm that St. Elizabeth's Hospital overall mortality rate for each of the three years reported was below the range predicted by the HCFA model. In the two statistically significant categories of patients, Coronary Artery By-Pass Graft and Prostatectomy, for which the Hospital's FY 1990 rate was slightly higher than predicted, the rate was within the standard deviation computed by the model.

We feel it is essential to take this opportunity to emphasize the importance, in releasing hospital-specific mortality data, of focusing attention on the major problems which affect the interpretation of reported mortality rates:

- The hospitals lack information on patients who died after discharge, making it impossible to verify the reported data. We have no way to verify the cause of those deaths, which could well be unrelated to the condition for which a patient was hospitalized or to quality of the care received in the hospital. They could have occurred from other causes during management of the patient at home or in a post acute treatment facility. Over the years covered by this study approximately 15% of the deaths included with St. Elizabeth's Hospital data fall into the category of post-discharge deaths within 30 days of admission.
- The study attempts to assess the relationship between important patient characteristics and the risk of death. However, data are not available to assess the relative risk of death associated with such critical factors as the stage and severity of the patient's illness, his/her health status and psychological condition, or family support.

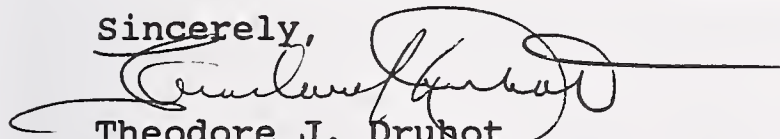
- Since mortality rates for Medicare patients differ substantially from that of other age groups no inference can be made from these data regarding the mortality rates for non-Medicare patients.

**St. Elizabeth's Hospital Role.** St. Elizabeth's Hospital plays a major role in medical education and bio-medical research as a university medical center of Tufts University School of Medicine. The Hospital offers a broad range of specialty services which attract high risk geriatric patients. These include referral programs in Cardiology/Cardiothoracic Surgery, Respiratory Disease, Gastroenterology, Neurology, End State Renal Disease and Hematology/Oncology. St. Elizabeth's places special emphasis on Gerontology. It is a referral hospital for the Good Samaritan Hospice, a fact which is particularly significant in interpreting mortality statistics which include post hospital deaths within 30, 90 and 180 days of admission.

**Quality Assurance.** St. Elizabeth's Hospital's principal goal is to provide high quality patient care. Efforts directed to this end include physician review of all deaths, focusing on unexpected deaths; regular meetings of all clinical and ancillary departments which routinely address patient care issues; and Medical Staff committees focused on the quality of patient care. The Department of Quality Assurance provides an ongoing system of collecting and evaluating information about important aspects of patient care. Toward this goal, all areas involved in the delivery of patient care services and outcomes are evaluated to insure that standards and guidelines comply with rules and regulations of the professional staffs. Problems identified and recommendations for corrective action are referred to the Medical Peer Review Committee, the Hospital President and the Board of Trustees.

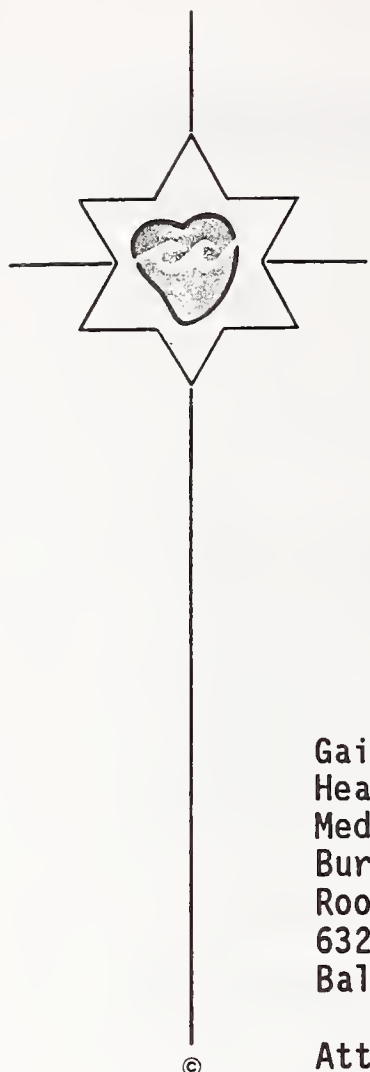
Thank you for the opportunity to comment on these data. If there are any questions, please call Mrs. Marie Barry at (617)789-2443.

Sincerely,



Theodore J. Druhot  
President





# *St. John's Hospital*

Provider No. 220082

March 12, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

Attn: Robert Moore

Re : St. John's Hospital, Lowell, MA  
Response to Medicare Mortality Data

St. John's Hospital is a 241 bed community hospital delivering quality care to primarily medical/surgical patients. Over the last year, the hospital's Medicare population has been 46.6% with an average age of 75.8 years.

The Board of Trustees, Administration, and the Medical Staff of St. John's Hospital are committed to the delivery of quality patient care. St. John's maintains an active staff of over 140 physicians, of whom 106 are Board Certified, and has been able to maintain its own adequate professional nurse staffing pattern.

Significant changes in methodology used by Health Care Financing Administration in preparation of mortality data, provides the hospital with more detailed information about its Medicare population. St. John's is pleased to comment on its mortality data as the percent of death in each category substantiates the commitment to the deliverance of quality patient care.

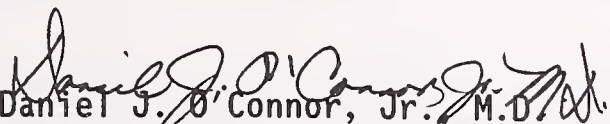
Review and analysis of St. John's Hospital mortality data reveals that there are no meaningful differences between the observed and predicted mortality rates. Out of the 17 listed categories of patient conditions and procedures, specific data released for St. John's Hospital



is as follows: 10 of the categories did not have enough patient deaths to be of any statistical significance. In four categories, St. John's had no patient deaths. Out of the four categories of no patient deaths, two procedures are not performed in this facility, and in the remaining three categories, the death rate is acceptable.

St. John's Hospital again wishes to take exception to the release of this data to the general public. Although the methodology has been modified again this year, the hospital remains convinced that this is not a valid indicator as to the quality of patient care rendered within any institution.

Sincerely,

  
Daniel J. O'Connor, Jr., M.D.  
President & Chief Executive Officer

DJO/dd

cc: C. Gregory Martin, M.D., Medical Director  
Jeffrey D. Stone, D.M.D., President, Medical Staff  
Patricia A. Burke, Esq., Sr. V.P., Internal & Legal Affairs



## *Saint Luke's Hospital of New Bedford, Inc.*

101 PAGE STREET, P.O. BOX H-3003, NEW BEDFORD, MA 02741-3003

508-997-1515

Medicare provider number: 220021

### COMMENTS ON THE HCFA MORTALITY RATE DATA

The following information is in response to the Health Care Financing Administration's data of mortality rates during fiscal year 1990 for St. Luke's Hospital of New Bedford, Inc., in New Bedford, Massachusetts.

It is divided into the following sections:

- . Accuracy and limitations of the HCFA data.
- . Ongoing quality assessment activities at St. Luke's Hospital.

### ACCURACY AND LIMITATIONS OF HCFA DATA

HCFA's report on mortality rates does not provide adequate data, medical review or specialized interpretation to be useful as a quality assessment guide or as a measurement of a hospital's performance. Limitations of the data most notably include weaknesses in the measurement of the severity of illness at the time of admission. This criteria is an extremely important indicator of a patient's prognosis and is particularly important when treating a large number of patients 75 years of age and older. The HCFA data is also not reflective of care provided by the hospital, because death could have resulted from a cause unrelated to the hospital admission.

The HCFA data assumes that each hospital's patients is equal in terms of the level of illness. The data does not consider severity of illness or account for a patient's condition at discharge. For example, St. Luke's has an 18-bed oncology unit where many patients are being treated for end-stage diseases. St. Luke's also operates a growing Hospice program which provides special care for terminally ill patients in their own homes. St. Luke's also has started a new cardiac catheterization laboratory which includes balloon implant insertion. These factors bear significance when examining the number of cancer or cardiac deaths after hospital discharge.

St. Luke's is also the sole provider of acute care services in its area and has an extremely large percentage of patients 75 years of age and older. Nearly half of all St. Luke's patients are Medicare recipients. Other services typically offered to the elderly include inpatient dialysis and the care of the acute stroke patient. Such services tend to attract patients who are more seriously ill. In fact, our case mix shows that St. Luke's is treating more acute patients.

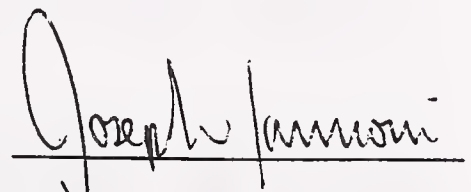
Equally important is the fact that the complexity and quantity of the data cannot be thoroughly or meaningfully interpreted within the time frame provided by HCFA.

### QUALITY ASSESSMENT AT ST. LUKE'S HOSPITAL

While St. Luke's is committed to providing quality care and has long considered mortality review as part of its regular quality assessment program, mortality rates, by themselves, do not measure quality and can only be used as a tool in the quality assessment process which requires review by medical professionals.

Through accreditation by the Joint Commission on the Accreditation of Healthcare Organizations, a national and voluntary accreditation process, the hospital insures that the highest standards are met in delivering patient care and providing a comprehensive quality assessment program. In addition, the hospital is licensed by the Commonwealth of Massachusetts which also mandates quality assessment programs.

St. Luke's quality assessment process starts early during a patient's hospital stay and monitors and evaluates every aspect of patient care, including unexpected occurrences, such as infection, as well as unexpected deaths.

A handwritten signature in black ink, appearing to read "Joseph Iannoni", written over a horizontal line.

Joseph Iannoni, Vice President  
Fiscal Services/CFO





220008

## Sturdy Memorial Hospital

211 Park Street | Attleboro, Massachusetts 02703-3137 | TEL (508) 222-5200 | FAX (508) 226-4383

LINDA J. SHYAVITZ  
President and Chief Executive Officer

March 12, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore

Dear Dr. Wilensky:

Sturdy Memorial Hospital, Attleboro, Massachusetts, appreciates the opportunity to comment on our FY 1990 HCFA mortality data. Before proceeding, however, it is important to state that no statistical model can define the presence or absence of quality medical care. At best, a model can only indicate areas that warrant further review.

Interpretation of this year's data release is somewhat less complicated than last year. Still, it will be necessary for any reader to study the technical notes carefully. Presentation of the data in graphic form should help in interpreting the numbers for "All Causes". However, for specific conditions and procedures, there will still be a predisposition to compare observed mortality to the predicted point mortality and conclude that any higher observed number is "bad". In fact, only if the observed mortality rate exceed the predicted rate by more than two standard deviations (SD) is it probable that the difference is meaningful and worthy of further review.

Again this year, Sturdy Memorial Hospital had no actual mortality rates that exceeded two SD above the predicted rate. Indeed, in most categories we do not meet the minimum statistical reliability threshold (established by HCFA) of fifty cases, so that the differences cannot be interpreted at all.

As always, though, we have incorporated this data into our ongoing quality assurance efforts. For the one category that appears problematic, acute myocardial infarction (AMI), every medical record abstract was reviewed. All but four of the AMI deaths occurred here at Sturdy, and two of them were transferred to other acute facilities. No quality of care issues have been identified. These patients represent very old and very sick people for whom death was not unexpected.

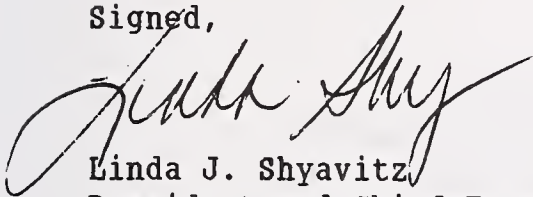
Medicare Hospital Information  
Bureau of Data Management and Strategy  
March 12, 1992

220008

Quality medical care is our top priority, and we certainly do not object to reviewing cases identified by HCFA statistics or by any other traditional case review audit methods. We have a hospital-wide total quality management/service excellence program, the medical care portion of which is coordinated through the Medical Director's Office. It includes medical staff performance, nursing quality assurance, risk management, infection control, and safety/security. Through the clinical department organization, as well as standing committees of the Medical Staff, quality of care is reviewed continuously. Unusual events are investigated even if death does not occur; mortality is only one area of review.

Thank you for the opportunity to comment.

Signed,

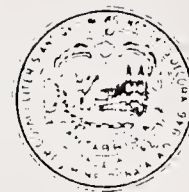
A handwritten signature in dark ink, appearing to read "Linda Shyavitz", written over the typed name.

Linda J. Shyavitz  
President and Chief Executive Officer  
Sturdy Memorial Hospital

LJS/alp



# The Cambridge Hospital



1493 Cambridge Street, Cambridge, Massachusetts 02139 (617) 498-1000

March 16, 1992  
I.D. Number 220011

*Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore*

Dear Dr. Wilensky:

Review of the FY 1990 Medicare Hospital Mortality Rates for the Cambridge Hospital shows that the Hospital's overall mortality rates are well within the predicted range for all time periods post admission. These rates represent a slight decline from the rates of FY 1989. In examining the rates for individual conditions and procedures, it should be noted that the numbers are generally too small to be meaningful. In the only category with enough cases to calculate a S.D., (congestive heart failure) our mortality rate was below expected.

The Cambridge Hospital has a very active quality assurance program, which includes the review of all deaths. All deaths and complications are first reviewed within each department and then reported to a hospital committee. This structure facilitates the identification of patterns and/or trends over time and insures that any such problem will be addressed. The fact that a patient dies after discharge is not in itself an indication of the quality of care provided. Many elderly patients with terminal conditions or end stage disease prefer to live out their lives at home with maximum supports or in a nursing home. These options are offered to all patients as part of the discharge planning process.

The Medicare patient population seen at the Cambridge Hospital represents a spectrum of complex medical problems. Many patients are admitted from nursing homes, 82% are admitted for emergency, and the average age is 75 years.

In an effort to continue to improve quality of care to all patients, mortality review (100%) will continue as an internal quality assurance mechanism.

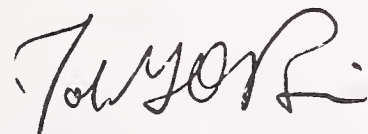


Additionally, HCFA data will be shared with the clinical departments.

In closing, it is concluded that there has been no area of concern. It is important, however, to emphasize that the predicted mortality rates do not reflect the care provided.

Thank you for continuing to produce and share this information with the hospital.

Sincerely,

A handwritten signature in dark ink, appearing to read "J. G. O'Brien". The signature is fluid and cursive, with a prominent "J" and "O".

John G. O'Brien  
Hospital Administrator

XC: Steven Lacy, M.D., President of the Medical Staff



Arlington, MA 02174-2199  
(617) 646-1500

Medical Provider 220053

DATE: March 10, 1992

Re: Symmes Response to HCFA Mortality Data

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Symmes Hospital is a community hospital caring, among others, for our families, friends, and neighbors. We take care to provide to each individual in need of our services the highest standard of professional care. In order to insure each patient the highest quality care we are committed to ongoing analysis of our performance, making changes when necessary.

Symmes Hospital has a comprehensive, hospital-wide Quality Improvement Program. All clinical disciplines within the hospital are required to constantly monitor the services they provide and to set goals to improve services. In addition, there are hospital-wide systems in place to monitor quality; these include patient complaint systems and screening mechanisms. This process is coordinated by a Quality Assurance Committee that meets regularly and is overseen by the Hospital's Board of Trustees.

Multiple sources are used to compile information about patient care in our Hospital. This is reviewed on an ongoing basis. We welcome the HCFA Data as interesting feedback from yet another potential source of useful information.

Although the exact relevance of this data is unclear at this time, we are pleased to have compared favorably in it. We will continue to study the information for its usefulness in managing our system and the care we provide.

Any questions should be directed to the Office of the President, David Speltz.



The  
University  
Hospital

88 East Newton Street  
Doctors Office Building 1107  
Boston, Massachusetts  
02118-2393  
617 638-6900

J. Scott Abercrombie, Jr., M.D.  
President and Chief  
Executive Officer

Medicare Provider No. 220031

March 19, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore

To Whom It May Concern:

Boston University Medical Center/The University Hospital appreciates the opportunity to comment on the Medicare mortality data released by the Health Care Financial Administration (HFCA). We have reviewed the mortality rates for all causes and all conditions and procedures, in which there were sufficient cases to be statistically significant, and the observed mortality was below the predicted mortality for all time periods. Also of importance was the fact that the observed mortality was below the predicted mortality consistently over the years FY 1988 - 1990.

We were pleased to note the methodological enhancements represented in the presentation of FY 1990 data and recalculated FY 1988 and 1989 data. In recognition of the continued need to refine the methodology, we would like to articulate the following concerns regarding Coronary Artery Bypass Graft (CABG) data:

1. Patients experiencing concomitant cardiac disorders such as valvular disease or ventricular septal defect are of much higher risk. Including these cases in the CABG mortality distorts the results, especially considering the small sample size. We suggest that a more accurate way of determining CABG mortality is to use DRG codes., i.e., DRGs 106 and 107 are assigned to patients undergoing CABG procedures exclusively, so that the sample pool would be far more homogeneous. In our own experience, observed CABG mortality decreases from 7.7% to 6.3% when recalculated using only DRGs 106 and 107.

2. The predicted mortality calculation for surgical procedures should include those risk factors that demonstrate patient acuity at the time of surgery. All significant national



Medicare Provider No. 220031

studies in cardiovascular disease include consideration of left ventricular function, the occurrence of previous MI and the circumstance of surgery. Although the HCFA data does weigh the circumstance of admission, no weight is given to the patient's status at the time of surgery.

I hope these comments and recommendations are considered in the development of further methodological changes which continue to make this information more meaningful and accurate.

Sincerely,



J. Scott Abercrombie, Jr., M.D.  
President



University of Massachusetts

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University of Massachusetts Medical Center  
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S. Keith Collins, M.D.  
Associate Chief of Staff  
Director of Clinical Computing

Medicare Provider Number: 220163

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore

March 17, 1992

Dear Dr. Wilensky:

Each year, as HCFA publishes the annual mortality rates for Medicare patients, we at the University of Massachusetts Medical Center take the opportunity to review the data for evidence of the effectiveness of our patient care. We take seriously our obligation to provide the highest quality of care to all of our patients, and we continually search for ways to improve.

Once again, we are gratified to find that our mortality statistics fall well within the expected range for our patient population, and indeed are significantly below the predicted level in the aggregate. Examination of specific subsets of the data appear to further confirm the overall quality of our care.

We, as you, are aware of the limitations of these data, and so view them as only one indicator among many that we continually monitor to assess and improve the effectiveness of patient care services at our institution. Nonetheless, we are pleased that our efforts to provide high quality, cost effective care seem to be reflected in the data you collect.

Sincerely,

Keith Collins, M.D.  
Associate Chief of Staff













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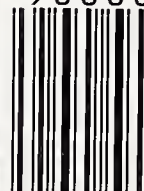


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